Learner Capability Framework: Employer Priorities Index

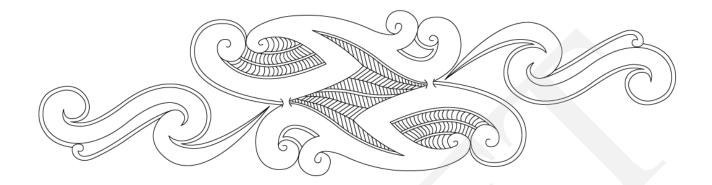
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March 30 2019



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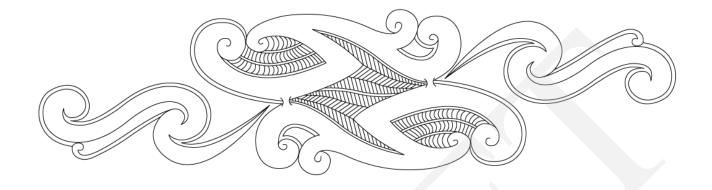
Cover Image: Ana Teofilo, Journey Part Two, mixed media on carved and painted board 2x4.1metres, 2013, (detail).



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Learner Capability Framework Research Project Phase One Report: Introduction



LCF Research Project

Phase One Report: Introduction

How can New Zealand teaching institutions equip learners to be more employment ready for the fastchanging world of future work? Which capabilities or transferable skills are priorities for employers / stakeholders when they consider graduates as employees?

These questions are central to the development of the Learner Capability Framework (LCF) at Otago Polytechnic. It has been internationally recognised in the previous two decades that the nature of the workplace, the environment, technology, the economy and society is changing. Key to supporting learners for this changing environment is the development of capabilities, or transferable skills, that can be applied in multiple and fluid work situations.

In order to respond to the questions above, the Research Team at Otago Polytechnic embarked on a journey of research of which the first phase connected lecturers with employers and stakeholders across fifteen identified clusters of programmes with a view towards inserting employer priorities with regard to capabilities into effective curriculum development. Otago Polytechnic will equip our learners with these prioritised capabilities and support them to provide evidence of having attained them. These capabilities will help our students to thrive, adapt and be effective in their chosen professions, trades and workplaces.

This publication, the first in a set of eight envisaged to disseminate a whole journey over two and a half years, reflects the action research undertaken by Otago Polytechnic towards the development of a Learner Capability Employer Priority Index (LCEPI). This LCEPI explains to the learner and to educators the most desirable capabilities that have been indicated as a snapshot during semi-structured interviews with samples of employers and stakeholders.

"... action research is a collaborative activity among colleagues searching for solutions to everyday, real problems experienced in schools [or other learning institutions], or looking for ways to increase student achievement." (Eileen Ferrance, 2000, no page)

This research is a first step towards addressing any existing imbalances between discipline-specific competencies and workplace capabilities in Otago Polytechnic's curricula. The project as a whole will enable learners in any discipline and at all levels to gain validated evidence of their transferable capabilities. A portfolio reflecting capabilities will complement the competencies gained in their education.

The research project will support the development of the LCF online tool for learners, through which they will be able to bring already identified and evidenced capabilities to the learning environment, and also to identify areas in which they need to develop. The Learner Capability Framework is aimed at improving learners' understanding of capabilities and their value for employment. Learners could increasingly become self-reflective practitioners, with a highly developed awareness of their own learning pathway and how to document evidence of it. Using the Learner Capability Framework could equip them to articulate to employers what capabilities they have acquired and how they have gained these.

As Phase 2 of the larger research project, the interviews mentioned above are also currently being transcribed and analysed for further, rich information about how we can improve our curricula. A second publication – in the set of eight – will result from this work.

Phase 3 will involve gathering narrative information from our alumni about their experiences as graduates in the workplace. Questions asked will focus on how Otago Polytechnic had equipped alumni for their employment and how this work can be improved.

"... learning and teaching cannot be understood without reference to context: the situated, social experience of the learner and/or teacher ... [reaching] beyond teaching and learning (and related activity) to values, what people perceive to be meaningful, important and relevant." (Nind & Lewthwaite, 2018, p.6.)



Ethnographic observations in workplaces will be the focus of Phase 4. These will analyse how capabilities play out in real world scenarios to test earlier findings and will also aim to provide contextual information regarding the kinds of capability evidence expected from our learners.

"...ethnographers search for predictable patterns in the lived human experiences by carefully observing and participating in the lives of those under study... collect data in multiple ways for triangulation ... is dialogic [as comment can be gained from those observed and it allows getting] an insider's view of reality." (Sangasubana, 2011, pp. 567-568)

Further phases (5 and 6) involving staff and students are planned for 2020. In that same year, Phase 7 will conclude a concurrent mapping of our curricula to gauge the embedding of the research into Otago Polytechnic programmes.

Throughout the project, Otago Polytechnic will also be working with our partners, the Kokiri Centre and Business New Zealand, whom we hope will benefit much from the Learner Capability Framework for their own purposes. Regular reporting on milestones will be lodged with Ako Aotearoa, and a final report will conclude Phase 8 early in 2021 as a summary of all findings.

The overall objective is to deliver and implement a Learner Capability Framework that enables learners to develop and evidence transferable capabilities to set them up for success in employment.

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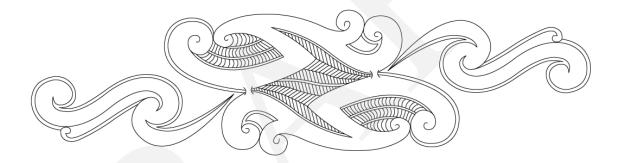
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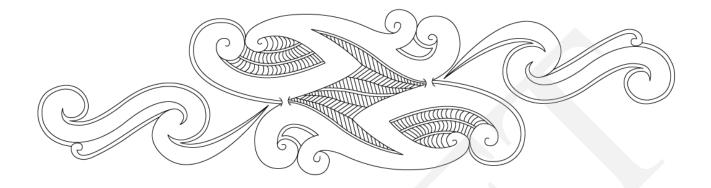
The following pages introduce the 25 capabilities identified in previous research by *iamcapable* that started work on this at the Otago Polytechnic Auckland International Campus in 2016. The tables after this show the results of Phase One for 15 programme clusters. The image for the capability and the text accompanying this offers explanations, while the summary at the top of each table provides information about the kinds of workplaces where interviews were held.



Learner Capabilities are ... 'a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and economy'.

(Yorke and Knight, 2006)







Learner Capability Framework



The Learner Capability Framework



The initiative to embed transferable skills (learner capabilities) into all of our programmes is based on evidenced employer demand to have access to graduates who have these skills. It is part of Otago Polytechnic's commitment to our learners to equip them to be work-ready when they graduate.

The Learner Capability framework is based on national and international research, and is informed by an ongoing research programme driven by Otago Polytechnic.

'iamcapable' is a web-based tool that students and tutors access to enable learners to track the development of these capabilities and to produce verified evidence of these capabilities.

What are the implications of this initiative?

For staff

As an institution and as educators, we accept the challenge to maximise the opportunities for our learners to intentionally develop transferable skills. We commit to giving our students opportunities to evidence and articulate these capabilities.

This means that we need to ask ourselves:





Are there learning outcomes which explicitly address these capabilities?



Are we using learning and teaching strategies that enable learners to develop these capabilities?



Are we robustly Ar assessing the th achievement of of capabilities, as tie we do technical ac skills and knowl- er edge?



Are we reporting the achievement of capabilities in a format accessible to employers?

If we can't answer a resounding 'yes' to each of these questions, the learner capability initiative provides us with a framework, tools and guidance to adapt our learning and teaching practice.

The Learner Capability project team and Learning and Teaching Development team are committed to supporting programme teams to embed learner capabilities in their unique learning and teaching environments.

The Learner Capability research initiative provides opportunities for staff to engage in research with industry. This strengthens academic-industry ties, and enhances professional academic capability.

For learners



The evidence-backed Capability Profile that our learners generate during their time at Otago Polytechnic is an assurance of their work-readiness.



Our learners become self-reflective practitioners who can articulate their capabilities.



Our curriculum and learning and teaching is grounded in the real world, generating opportunities for learners to develop transferable skills for employment and for life.

For employers

Employers tell us that they value evidence-backed capabilities, over and above CVs or transcripts.



We develop graduates that have the qualities employers have told us they are looking for.



We value and strengthen our relationships with employers.



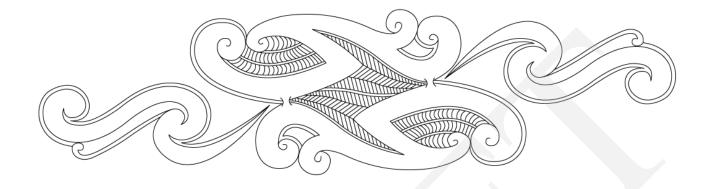
We remain relevant and abreast of industry developments.

The Learner Capability Framework

CAPABIL	ITIES	SUMMARY
[==]	Communicates	Use written language appropriately
	Effectively in Writing	Apply appropriate tone and style
		Read and understand information
	Communicates	Use verbal, non-verbal language appropriately
\mathcal{L}_{Q}	Effectively Verbally	Apply style and types to suit diverse audiences
		Discuss professional issues orally
	Communicates Effectively Visually	Use different methods and styles of visual language
6 0	Displays Effective	Listen actively
Kor	Interpersonal Behaviour	Apply appropriate body language
		Overcome conflict
<u>A</u> B	Displays Cultural	Respect and embrace diverse perspectives
Å Å	Competence	Understand other cultures and engage appropriately
		Be responsible and manage behaviour
	Displays Bi-cultural	Apply Te Ao Māori and tikanga Māori
\bigcirc	Proficiency in a NZ Context	Incorporate matauranga Maori and the Treaty of Waitangi in decision-making
		Demonstrate an understanding of the Treaty of Waitangi
Ø	Works Independently	Organise commitments to meet deadlines without supervision
$\label{eq:label}$		Adapt and operate beyond comfort zone
		Act on instructions received
2 B	Works in teams	Build trust and collaboration
ጠለሻ		Plan and complete projects by deadlines
	Reflects on Performance & Applies Personal	Develop self-awareness
	Learning	Engage in reflective practice
		Pursue personal learning and change
ξÔ}	Acts Responsibly	Respond proactively
M		Honour promises
		Avoid making excuses
		Accept responsibility for projects and results
₽_	Practises Health & Safety	Assure workplace safety
()+		Comply with health and safety procedures
		Reduce risk to personal safety and health

CAPABIL	TIES	SUMMARY
	Demonstrates Digital	Apply digital technologies in work contexts
	Competence	Digitally proficient online
		Use social media appropriately
		Calculate and analyze in a digital environment
Soore	Organises Effectively	Improve and manage physical environments
		Plan and prioritise
		Maintain wellness
	Demonstrates Resilience	Persevere and plan actions
I⊘≡		Maintain optimism under adversity
		Embrace new ideas and realities
	Thinks Creatively	Develop creative solutions
Ŷ		Test and evaluate new ideas and solutions
		Inspire, collaborate, communicate and delegate
		Coach and support emerging leaders
Ś	Displays Leadership	Motivate, listen, co-create and value other people
(Challenge and resolve inappropriate behaviour respectfully
-52-	Inspires others	Motivate others to take opportunities
\sim	Enterprising	Make a difference
S/		Energise people for success
*		Achieve bold new outcomes
		Undertake creative challenges
7	Practises Sustainably	Measure sustainability initiatives to determine impacts
(\mathcal{S})		Advocate for change
		Model sustainable practice
(\cdot, \cdot)	Practises Ethically	Manage my behaviour and act ethically
\bigcirc		Maintain best practice and equity
		Maintain confidence and trust
(til)	Thinks Critically	Identify opportunity and overcome obstacles
23		Evaluate information and research and act on conclusions
\bigcirc	Solves Problems	Identify underlying causes of problems
U.		Collaborate to solve problems
		Reframe problems as opportunities
$\Theta $	Communicates Bilingually	Communicate orally in a second language
20		Speak, read and write in a second language
ر لیے	Displays Work Life	Work hard, keep active and enjoy life
64	Balance	Laugh and show a sense of humour
Performs Community Engage in community action Service		Engage in community action







The Learner Capability Framework: Employer Priority Index



Employer Priority Index

Employers and stakeholders identified by lecturers in 15 programme clusters were asked to prioritise the top 10 Learner Capabilities – from the 25 identified through previous research – that apply best to their workplace or employment area. The results shown on the following pages reflect both the similarities and differences in capabilities required from graduates to be considered work ready as indicated by the employers/stakeholders interviewed.



Interviews Held

The table below shows the scope of the initial (employer/stakeholder) interviews for each programme cluster. The interviews resulted in recordings – in a few cases notes were taken – which are to be transcribed and analysed for the next phase of the project. Interviewers also arranged the order of capability priorities indicated by each interviewee. These were recorded onto separate summary sheets, and were then coded for importance and frequency of selection. This was done for each interview and collected into the programme clusters for which interviews were undertaken. These priorities are presented in the following pages as the 10 most desirable capabilities as indicated by the employers/ stakeholders interviewed. In some cases two priorities were ranked equal and this is shown clearly on the following pages.

Programme Clusters	No. of Interviewers	No. of Employers Interviewed
Applied Science (Sports)	4	10
Architecture	2	7
Business	5	21
Design – Communication	2	6
Design – Fashion	3	10
Design – Food Institute	2	7
Design – Product	3	6
Engineering Technology	2	9
Information Technology	3	11
Midwifery	6	13
Nursing	5	19
Occupational Therapy	4	10
Quantity Surveying	2	8
Social Services	4	13
Visual Arts	4	13
	51	163



Applied Science (Sports)

Applied Science (Sports) graduates may take up roles in both small and large organisations. Some may have a focus solely on performance training and development, while others work for group organisation and coordination related to this area. Employers for this cluster comprise a variety of different areas in the sports landscape, from national sports performance analysts, community centres and group coordinators to physical trainers working in schools and private organisations. Capability priorities in this are effective written communication, the ability to work in teams, demonstrating resilience, and practicing ethically.

		Communicates effectively in Writing	Use written language appropriately
1			Apply appropriate tone and style
			Read and understand information
0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Works in Teams	Build trust and collaboration
2	ÄÄ		Plan and complete projects by deadlines
		Demonstrates	Persevere and plan actions
3	$\otimes \equiv$	Resilience	Maintain optimism under adversity
			Embrace new ideas and realities
	\bigcirc	Practises Ethically	Manage my behaviour and act ethically
4	$\begin{pmatrix} \bullet & \bullet \\ & & \end{pmatrix}$		Maintain best practice and equity
			Maintain confidence and trust
		Reflects on	Develop self-awareness
5		Performance & Applies Personal Learning	Engage in reflective practice
			Pursue personal learning and change
6		Inspires Others	Motivate others to take opportunities
	Rop	Displays Effective Interpersonal Behaviour	Listen actively
7			Apply appropriate body language
			Overcome conflict
		Acts Responsibly	Respond proactively
0	503		Honour promises
0	Ĩ		Avoid making excuses
			Accept responsibility for projects and results
		Works	Organise commitments to meet deadlines without supervision
9	R	Independently	Adapt and operate beyond my comfort zone
			Act on instructions received
		Thinks Creatively	Develop creative solutions
10	(ui)		Test and evaluate new ideas and solutions
10			Inspire, collaborate, communicate and delegate
			Coach and support emerging leaders



Architectural Studies

Architectural studies graduates may work in architecture practices, mainly in architectural technology or interior architecture positions, as well as professions associated with the built environment. Problem solving, digital competency, thinking creatively and being able to work in teams encompass the top of the 10 most desirable capabilities for graduates from this area.

\bigcirc	Solves Problems	Identify underlying causes of problems Collaborate to solve problems
(?)		Collaborate to solve problems
\smile \backslash		
		Reframe problems as opportunities
	Demonstrates Digital	Identify underlying causes of problems
	Competence	Collaborate to solve problems
		Reframe problems as opportunities
_ —	Communicates	Use written language appropriately
	Effectively in Writing	Apply appropriate tone and style
		Apply appropriate tone and style
	Thinks Creatively	Develop creative solutions
(ω)		Test and evaluate new ideas and solutions
		Inspire, collaborate, communicate and delegate
		Coach and support emerging leaders
R	Works in Teams	Build trust and collaboration
A.A.		Plan and complete projects by deadlines
J O C	Organises Effectively	Improve and manage physical environments
		Plan and prioritise
		Maintain wellness
	Communicates Effectively Verbally	Use verbal, non-verbal language appropriately
		Apply style and types to suit diverse audiences
ÐQ		Discuss professional issues orally
		Use non-verbal language appropriately
1	Reflects on Performance & Applies Personal Learning	Develop self-awareness
		Engage in reflective practice
		Pursue personal learning and change
101	Communicates	Use different methods and styles of visual language
	Effectively Visually	Convey culturally appropriate ideas and information that can be seen
B	Thinks Critically	Identify opportunity and overcome obstacles
		Communicates Effectively in Writing Thinks Creatively Works in Teams Works in Teams Organises Effectively Communicates Effectively Verbally Effects on Performance & Applies Personal Learning Communicates



Business

Business graduates may perform specialised or multiple roles within any organisation including event management, marketing, accounting and tourism The capabilities prioritised indicate that graduates from this area are required to work across teams, to communicate effectively verbally, to solve problems and to display effective interpersonal behavior. demonstrate cultural competence and effectively organise.

4		Works in Teams	Build trust and collaboration
	Ĩ.		Plan and complete projects by deadlines
		Communicates	Use verbal, non-verbal language appropriately
0		Effectively Verbally	Apply style and types to suit diverse audiences
2	$\mathbb{P}^{\mathbb{Q}}$		Discuss professional issues orally
			Use non-verbal language appropriately
		Displays Effective	Listen actively
3	RAR	Interpersonal	Apply appropriate body language
		Behaviour	Overcome conflict
-	\bigcirc	Solves Problems	Identify underlying causes of problems
4	(?)		Collaborate to solve problems
	\smile		Reframe problems as opportunities
_		Communicates	Use written language appropriately
5		Effectively in Writing	Apply appropriate tone and style
			Read and understand information
-		Organises Effectively	Improve and manage physical environments
6	₹ Contine		Plan and prioritise
	\Box		Maintain wellness
		Demonstrates Digital Competence	Identify underlying causes of problems
7			Collaborate to solve problems
			Reframe problems as opportunities
		Displays Cultural Competence	Respect and embrace diverse perspectives
8	<u>東</u> 夏		Understand other cultures and engage appropriately
			Be responsible and manage behaviour
	,	Reflects on	Develop self-awareness
9		Performance & Applies Personal Learning	Engage in reflective practice
			Pursue personal learning and change
		Acts Responsibly	Respond proactively
10	503		Honour promises
IU	1 T		Avoid making excuses
			Accept responsibility for projects and results
		Works Independently	Organise commitments to meet deadlines without supervision
10	R.		Adapt and operate beyond my comfort zone
			Act on instructions received

Graduates of the Design suite of programmes at Otago Polytechnic span the spectrum of Communication Design, Fashion Design, Food Design, and Product Design. Capabilities prioritised by those interviewed for this cluster have been separated to reflect the different needs for each programme in the suite.

Communication Design

Employers interviewed range from industry and brand developers to advertising and digital technology developers, exhibition and museum designers, and game developers. Prioritised capabilities from this strand of design are the ability to communicate effectively both in writing and verbally, working in teams, and acting responsibly.

		Communicates	Use verbal, non-verbal language appropriately
-		Effectively Verbally	Apply style and types to suit diverse audiences
	$\mathcal{L}\mathcal{Q}$		Discuss professional issues orally
			Use non-verbal language appropriately
		Thinks Creatively	Develop creative solutions
0		-	Test and evaluate new ideas and solutions
2			Inspire, collaborate, communicate and delegate
			Coach and support emerging leaders
	\frown	Solves Problems	Identify underlying causes of problems
3	(?)		Collaborate to solve problems
	\smile		Reframe problems as opportunities
		Works Independently	Organise commitments to meet deadlines without supervision
4	R,		Adapt and operate beyond my comfort zone
			Act on instructions received
E	<u> </u>	Works in Teams	Build trust and collaboration
C	A.A.		Plan and complete projects by deadlines
		Organises Effectively	Improve and manage physical environments
6	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Plan and prioritise
	\bigcup		Maintain wellness
_		Communicates	Use written language appropriately
7		Effectively in Writing	Apply appropriate tone and style
			Read and understand information
		Acts Responsibly	Respond proactively
0	£Ô3		Honour promises
0	Ĩ		Avoid making excuses
			Accept responsibility for projects and results
0	10,1	Communicates	Use different methods and styles of visual language
9		Effectively Visually	Convey culturally appropriate ideas and information that can be seen
10	(B)	Thinks Critically	Identify opportunity and overcome obstacles
IU	ブイ	-	Evaluate information and research and act on conclusions

Fashion Design

Fashion design graduates may find themselves in many areas of this large industry, ranging from garment manufacture and design to retail, accessory design and manufacture, advertising and magazine roles in both print and digital formats. They may work as a part of a team, or manage their own brand or design house. Workplaces interviews in this area included all of these possible destinations for graduates and the most desirable capabilities prioritised for this area are effective communication through writing, digital competence, the ability to work independently and in teams.

		Communicates	Develop creative solutions
-		Effectively in Writing	Test and evaluate new ideas and solutions
			Inspire, collaborate, communicate and delegate
			Coach and support emerging leaders
		Demonstrates Digital	Identify underlying causes of problems
2		Competence	Collaborate to solve problems
			Reframe problems as opportunities
0	\bigcirc	Works Independently	Build trust and collaboration
3	AL /		Plan and complete projects by deadlines
	Q	Works in Teams	Listen actively
4	Q Q		Apply appropriate body language
	()(~)		Overcome conflict
		Thinks Creatively	Use verbal, non-verbal language appropriately
5			Apply style and types to suit diverse audiences
C			Discuss professional issues orally
			Use non-verbal language appropriately
6	\bigcirc	Solves Problems	Identify opportunity and overcome obstacles
O	(L		Evaluate information and research and act on conclusions
		Communicates Effectively Verbally	Improve and manage physical environments
7			Plan and prioritise
	2		Maintain wellness
		Thinks Critically	Persevere and plan actions
8	(53)	-	Maintain optimism under adversity
	$\langle \rangle$		Embrace new ideas and realities
	<u>^</u>	Displays Effective	Organise commitments to meet deadlines without supervision
9	Rop	Interpersonal	Adapt and operate beyond my comfort zone
		Behaviour	Act on instructions received
		Organises Effectively	Use written language appropriately
10	NOV CAL	J	Apply appropriate tone and style
	\bigcup		Read and understand information



Food Design

Food design capabilities are relevant to a network of hospitality and food industry workplaces in which graduates find themselves post qualification. Large function management companies, hotels and catering services along with commercial enterprises in the food industry were interviewed and they prioritised the need for graduates to work in teams, display effective interpresonal behaviour, organise effectively, and act responsibly.

- 1	a Pa	Works in Teams	Build trust and collaboration
	(T) (T)		Plan and complete projects by deadlines
	Rap	Displays Effective	Listen actively
2		Interpersonal	Apply appropriate body language
		Behaviour	Overcome conflict
		Organises Effectively	Improve and manage physical environments
3	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Plan and prioritise
			Maintain wellness
		Acts Responsibly	Respond proactively
Λ	sôz	. ,	Honour promises
4	Ĭ		Avoid making excuses
			Accept responsibility for projects and results
		Thinks Creatively	Develop creative solutions
E			Test and evaluate new ideas and solutions
C			Inspire, collaborate, communicate and delegate
			Coach and support emerging leaders
	(?)	Solves Problems	Identify underlying causes of problems
6			Collaborate to solve problems
	\sim		Reframe problems as opportunities
_	\bigcirc	Practises Health & Safety	Assure workplace safety
7	X.		Comply with health and safety procedures
			Reduce risk to personal safety and health
	,	Reflects on	Develop self-awareness
8	í	Performance & Applies Personal Learning	Engage in reflective practice
			Pursue personal learning and change
	-+++-	Demonstrates	Persevere and plan actions
9	$\otimes \equiv$	Resilience	Maintain optimism under adversity
5			Embrace new ideas and realities
10	$\langle \cdot \rangle$	Displays Leadership	Motivate, listen, co-create and value other people
	$\langle \gamma \rangle$		Challenge and resolve inappropriate behaviour respectfully



Product Design

Product design lecturers interviewed employers in design studios, industry manufacturing, start-up hubs and social community sustainability networks. Capabilities found to be most desirable for this programme area are creative thinking, problem solving, working in teams, and displaying effective interpersonal behaviour.

_				
		\frown	Thinks Creatively	Develop creative solutions
	1	(uu)		Test and evaluate new ideas and solutions
	•	틴		Coach and support emerging leaders
			Solves Problems	Identify underlying causes of problems
	2	(?)		Collaborate to solve problems
_		\smile		Reframe problems as opportunities
	9		Works in Teams	Build trust and collaboration
	3	ÄÄ		Plan and complete projects by deadlines
		~ ~	Displays Effective	Listen actively
	4	RAN	Interpersonal	Apply appropriate body language
		,1	Behaviour	Overcome conflict
			Communicates	Use verbal, non-verbal language appropriately
	5		Effectively Verbally	Apply style and types to suit diverse audiences
	C	$\mathbb{P}^{\mathbb{Q}}$		Discuss professional issues orally
				Use non-verbal language appropriately
	C	63	Thinks Critically	Identify opportunity and overcome obstacles
	O	ХĽ		Evaluate information and research and act on conclusions
	_	RUVOD	Organises Effectively	Improve and manage physical environments
	7			Plan and prioritise
	•	\bigcirc		Maintain wellness
		-+++-	Demonstrates Resilience	Persevere and plan actions
	8	ØE		Maintain optimism under adversity
				Embrace new ideas and realities
			Works Independently	Organise commitments to meet deadlines without supervision
	9	R.		Adapt and operate beyond my comfort zone
				Act on instructions received
	•		Communicates	Use written language appropriately
9	9		Effectively in Writing	Apply appropriate tone and style
				Read and understand information
			Acts Responsibly	Respond proactively
	10	ξÔ3		Honour promises
	IU	Ĭ		Avoid making excuses
				Accept responsibility for projects and results

 $\sum_{i=1}^{n} \sum_{i=1}^{n} \sum_{i$

Engineering Technology

Engineering Technology graduates may have positions within teams of larger companies offering many services, or they can be a part of the larger specific subcontractor roles associated with engineering and construction processes. Interviews conducted for this cluster included a cross-section of large service organisations and industry. The results reflect that employers need problem solving, the display of effective interpersonal behaviour, working in teams, and the practice of health and safety most.

	(?)	Solves Problems	Identify underlying causes of problems
1			Collaborate to solve problems
	\smile		Reframe problems as opportunities
	~ (Displays Effective	Listen actively
2	Roff	Interpersonal	Apply appropriate body language
_		Behaviour	Overcome conflict
0	~ Q	Works in Teams	Build trust and collaboration
J	ÄÄ		Plan and complete projects by deadlines
	\bigcirc	Practises Health &	Assure workplace safety
4	X f	Safety	Comply with health and safety procedures
			Reduce risk to personal safety and health
		Communicates	Use verbal, non-verbal language appropriately
5		Effectively Verbally	Apply style and types to suit diverse audiences
C	$\mathbb{P}^{\mathbb{Q}}$		Discuss professional issues orally
			Use non-verbal language appropriately
	ζÔζζ	Acts Responsibly	Respond proactively
6			Honour promises
O			Avoid making excuses
			Accept responsibility for projects and results
_		Communicates	Use written language appropriately
7		Effectively in Writing	Apply appropriate tone and style
			Read and understand information
0		Thinks Critically	Identify opportunity and overcome obstacles
0	25		Evaluate information and research and act on conclusions
		Demonstrates	Persevere and plan actions
g	$\otimes \equiv$	Resilience	Maintain optimism under adversity
			Embrace new ideas and realities
	- 17-0	Organises Effectively	Improve and manage physical environments
10	JOAC C		Plan and prioritise
	\bigcup		Maintain wellness



Information technology

This area of the workforce is both critical and essential to the running of almost every workplace in New Zealand. Information Technology support and services are fundamental to connection and communication. Workplaces interviewed for this cluster ranged from organisations and companies to service providers and developers of information technology platforms for service. Results of the research indicate that working in teams and independently, solving problems and thinking critically are priorities for those interviewed.

-1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Works in Teams	Build trust and collaboration
	A.A		Plan and complete projects by deadlines
	\bigcirc	Works Independently	Organise commitments to meet deadlines without supervision
2	R,		Adapt and operate beyond my comfort zone
_			Act on instructions received
		Solves Problems	Identify underlying causes of problems
3	(?)		Collaborate to solve problems
	\bigcirc		Reframe problems as opportunities
Λ	(B)	Thinks Critically	Identify opportunity and overcome obstacles
4	ŽК		Evaluate information and research and act on conclusions
_	\bigcirc	Practises Ethically	Manage my behaviour and act ethically
5	$\begin{pmatrix} \bullet & \bullet \\ & \bullet \end{pmatrix}$		Maintain best practice and equity
	\bigcirc		Maintain confidence and trust
		Demonstrates Digital Competence	Apply digital technologies in work contexts
C			Digitally proficient online
O			Use social media appropriately
			Apply measurement analysis
		Acts Responsibly	Respond proactively
7			Honour promises
			Avoid making excuses
			Accept responsibility for projects and results
		Reflects on Performance & Applies Personal Learning	Develop self-awareness
8			Engage in reflective practice
~			Pursue personal learning and change
		Communicates Effectively Verbally	Use verbal, non-verbal language appropriately
0			Apply style and types to suit diverse audiences
9			Discuss professional issues orally
			Use non-verbal language appropriately
		Displays Effective Interpersonal Behaviour	Listen actively
10	Rog		Apply appropriate body language
	· ~ / ·		Overcome conflict



Midwifery

Midwifery graduates are autonomous practitioners and work across primary, secondary and tertiary sectors of the community, both in urban and rural areas. Similarly, to other regulated health professions, the competencies of the graduate are central to practice, and research findings around capability should support how these are applied in the professional situation. Participants included community midwives, midwifery managers, midwifery educators and consumers. The 13 participants interviewed ranked the following capabilities as most valued: reflection on performance and application of personal learning, effective verbal communication skills, effective interpersonal behaviour and cultural competence.

		Reflects on Performance & Applies Personal Learning	Develop self-awareness
1			Engage in reflective practice
-			Pursue personal learning and change
		Communicates	Use verbal, non-verbal language appropriately
0	(=)	Effectively Verbally	Apply style and types to suit diverse audiences
2	$\mathbb{P}^{\mathbb{Q}}$		Discuss professional issues orally
			Use non-verbal language appropriately
	A	Displays Effective Interpersonal Behaviour	Listen actively
3	RAR		Apply appropriate body language
			Overcome conflict
		Displays Cultural Competence	Respect and embrace diverse perspectives
4	₽ <u>₿</u>		Understand other cultures and engage appropriately
			Be responsible and manage behaviour
_	R	Works in Teams	Build trust and collaboration
5	RA		Plan and complete projects by deadlines
<u> </u>	R	Thinks Critically	Identify opportunity and overcome obstacles
6	X		Evaluate information and research and act on conclusions
	\bigcirc	Practises Ethically	Manage my behaviour and act ethically
7	$\left(\begin{array}{c} \bullet & \bullet \\ \bullet & \bullet \end{array}\right)$		Maintain best practice and equity
			Maintain confidence and trust
		Organises Effectively	Improve and manage physical environments
8	[™] [™] [™]		Plan and prioritise
	\bigcup		Maintain wellness
		Solves Problems	Identify underlying causes of problems
9	(\mathbf{S})		Collaborate to solve problems
			Reframe problems as opportunities
	-+++-	Demonstrates Resilience	Persevere and plan actions
10	\odot		Maintain optimism under adversity
			Embrace new ideas and realities



Nursing

Graduates from Nursing find work in both large and small health focused organisations where their competencies are key to undertaking the role. Therefore, the findings of this research area focused on those capabilities that could support nursing graduates to navigate their area of work and the many challenges that it encompasses. High value is placed by those interviewed on resilience, working in teams, thinking critically, and displaying effective interpersonal behaviour in roles spanning hospital situations, community health care, senior, paediatric, and palliative and rest home care situations where interviews were held.

-		_+++-	Demonstrates Resilience	Persevere and plan actions
	1	$\otimes \equiv$		Maintain optimism under adversity
				Embrace new ideas and realities
	0	Ř	Works in Teams	Build trust and collaboration
	2			Plan and complete projects by deadlines
-	0	B	Thinks Critically	Identify opportunity and overcome obstacles
	3	ŽК		Evaluate information and research and act on conclusions
-			Displays Effective Interpersonal Behaviour Communicates Effectively Verbally	Listen actively
	4	RAR		Apply appropriate body language
				Overcome conflict
				Use verbal, non-verbal language appropriately
	5			Apply style and types to suit diverse audiences
	C	$\mathbb{D}^{\mathbb{Q}}$		Discuss professional issues orally
				Use non-verbal language appropriately
-		\bigcirc	Solves Problems	Identify underlying causes of problems
	6	(?)		Collaborate to solve problems
		\sim		Reframe problems as opportunities
	7	700C	Organises Effectively	Improve and manage physical environments
				Plan and prioritise
_	-			Maintain wellness
ſ	0		Communicates Effectively in Writing	Use written language appropriately
	8			Apply appropriate tone and style
				Read and understand information
Y		ţ	Displays Cultural Competence	Respect and embrace diverse perspectives
L	8			Understand other cultures and engage appropriately
				Be responsible and manage behaviour
			Acts Responsibly	Respond proactively
	Q			Honour promises
	3			Avoid making excuses
_				Accept responsibility for projects and results
	10		Practises Health & Safety	Assure workplace safety
	10	KŦ		Comply with health and safety procedures
_		· · · —		Reduce risk to personal safety and health

 $\sum_{i=1}^{n} \sum_{i=1}^{n} \sum_{i$

Occupational Therapy

Graduates of occupational therapy find themselves in many different roles in rehabilitation work, and this is reflected in the wide-ranging nature of employers and stakeholders interviewed from local and national health boards, including both practitioners and managers associated with these structures. Community and specific demographic outreach and well-ness organisations and physiotherapists were also included, reflecting the multiple and complex facets of the occupational therapist's role. Cultural competence, displaying effective interpersonal behavior, solving problems, and communication effectively verbally were prioritized by those interviewed.

		Displays Cultural Competence	Respect and embrace diverse perspectives
1			Understand other cultures and engage appropriately
			Be responsible and manage behaviour
	<u>^</u>	Displays Effective	Listen actively
2	Rap	Interpersonal	Apply appropriate body language
		Behaviour	Overcome conflict
	\bigcirc	Solves Problems	Identify underlying causes of problems
3	(?)		Collaborate to solve problems
	\smile		Reframe problems as opportunities
		Communicates	Use verbal, non-verbal language appropriately
Λ		Effectively Verbally	Apply style and types to suit diverse audiences
4	$\mathbb{P}^{\mathbb{Q}}$		Discuss professional issues orally
			Use non-verbal language appropriately
_		Works Independently	Organise commitments to meet deadlines without supervision
5	R,		Adapt and operate beyond my comfort zone
			Act on instructions received
		Reflects on Performance & Applies Personal Learning	Develop self-awareness
6			Engage in reflective practice
U	аПШ		Pursue personal learning and change
			Reframe problems as opportunities
	F	Communicates Effectively in Writing	Use written language appropriately
7			Apply appropriate tone and style
			Read and understand information
		Demonstrates Resilience	Persevere and plan actions
8	ØΞ		Maintain optimism under adversity
			Embrace new ideas and realities
0	and a	Works in Teams	Build trust and collaboration
Э	ÄÄ		Plan and complete projects by deadlines
10	63	Thinks Critically	Identify opportunity and overcome obstacles
IU	X	· · · · · · · · · · · · · · · · · · ·	Evaluate information and research and act on conclusions

Quantity Surveying

Employers from this area work in building, plumbing, electrical and construction services and companies. Graduates from this area are important to the chain of the construction process, and often work between the different components of the wider process. Results from those interviewed in these areas indicate the need for employees to work in teams, to communicate effectively verbally, to solve problems and to act responsibly.

-1		Works in Teams	Build trust and collaboration
	ÅÅ		Plan and complete projects by deadlines
		Communicates	Use verbal, non-verbal language appropriately
0	(=)	Effectively Verbally	Apply style and types to suit diverse audiences
2	$\mathbb{P}^{\mathbb{Q}}$		Discuss professional issues orally
			Use non-verbal language appropriately
	\bigcirc	Solves Problems	Identify underlying causes of problems
3	(?)		Collaborate to solve problems
	\smile		Reframe problems as opportunities
		Acts Responsibly	Respond proactively
Λ	503		Honour promises
4	Ĩ		Avoid making excuses
			Accept responsibility for projects and results
_		Communicates	Use written language appropriately
5		Effectively in Writing	Apply appropriate tone and style
			Read and understand information
_		Reflects on Performance & Applies Personal Learning	Develop self-awareness
6			Engage in reflective practice
-			Pursue personal learning and change
		Practises Ethically	Manage my behaviour and act ethically
7			Maintain best practice and equity
			Maintain confidence and trust
		Organises Effectively	Improve and manage physical environments
8			Plan and prioritise
	\cup		Maintain wellness
	0	Practises Health & Safety	Assure workplace safety
9	XF		Comply with health and safety procedures
			Reduce risk to personal safety and health
10	B	Thinks Critically	Identify opportunity and overcome obstacles
IU	ŽЧ		Evaluate information and research and act on conclusions



Social Services

This area presents a range of employment opportunities for graduates, and findings from this initial phase of research present a wide view of the capabilities learners in this area of study require for active and successful participation in industry and workplaces. Employers and stakeholders interviewed work in community outdoor groups and services, support hubs and rehabilitation centres, including counselling and disability services. Capability for graduates identified by those interviewed highlights practicing ethically, effective verbal communication, working in teams, and displaying effective interpersonal behaviour. The high value placed on these capabilities reflect the people centeredness and reflective practice nature of the working environments in which Social Services graduates are active in supporting people in the community.

		(\cdot, \cdot)	Practises Ethically	Manage my behaviour and act ethically
	1			Maintain best practice and equity
	-			Maintain confidence and trust
			Communicates	Use verbal, non-verbal language appropriately
	9		Effectively Verbally	Apply style and types to suit diverse audiences
	4			Discuss professional issues orally
				Use non-verbal language appropriately
	2		Works in Teams	Build trust and collaboration
	3	ÄÄ		Plan and complete projects by deadlines
	-	<u></u>	Displays Effective Interpersonal Behaviour	Listen actively
	4	RAR		Apply appropriate body language
		. / ·		Overcome conflict
	_		Organises Effectively	Improve and manage physical environments
	5			Plan and prioritise
		\bigcup		Maintain wellness
			Displays Cultural Competence	Respect and embrace diverse perspectives
	6	<u>t</u>		Understand other cultures and engage appropriately
				Be responsible and manage behaviour
	_	Ř+	Practises Health & Safety	Assure workplace safety
	7			Comply with health and safety procedures
				Reduce risk to personal safety and health
		_	Displays Bi-cultural Proficiency in a NZ Context	Apply Te Ao Māori and tikanga Māori
	8	\bigcirc		Incorporate mātauranga Māori and the Treaty of Waitangi in
	U			decision-making
				Demonstrate an understanding of the Treaty of Waitangi
			Reflects on Performance & Applies Personal Learning	Develop self-awareness
	9	$\sum_{n \in \mathbb{N}}$		Engage in reflective practice
	•			Pursue personal learning and change
		?	Solves Problems	Identify underlying causes of problems
	9			Collaborate to solve problems
				Reframe problems as opportunities
		 +_+	Demonstrates Resilience	Persevere and plan actions
	10	\otimes		Maintain optimism under adversity
	•••			Embrace new ideas and realities

Visual Arts

The visual arts encompass a wide range of employment and industry links that graduates find themselves in post qualification. These include more traditional roles in the arts industry associated with curation, installation and other gallery centric roles, as well as roles in technology and the film arts. Employer and industry stakeholders interviewed for this cluster ranged from gallery representatives, installation and curation workers in large public institutions and in smaller dealer galleries, in museums, teaching and learning roles and in other areas outside of the arts context in which graduates find work. The capabilities most desirable for those interviewed are effective verbal communication, creative thinking, effective organisation, and working in teams.

-			Communicates Effectively Verbally	Use verbal, non-verbal language appropriately
	1			Apply style and types to suit diverse audiences
		$\mathcal{D}\mathcal{Q}$		Discuss professional issues orally
				Use non-verbal language appropriately
			Thinks Creatively	Develop creative solutions
	9	(ω)		Test and evaluate new ideas and solutions
	2			Inspire, collaborate, communicate and delegate
				Coach and support emerging leaders
	•		Organises Effectively	Improve and manage physical environments
	3			Plan and prioritise
		\bigcirc		Maintain wellness
	1	- Pa	Works in Teams	Build trust and collaboration
	4	ÄÄ		Plan and complete projects by deadlines
K		A	Displays Effective Interpersonal Behaviour	Listen actively
	4	Ran		Apply appropriate body language
L				Overcome conflict
	F	B	Thinks Critically	Identify opportunity and overcome obstacles
	C	Ž		Evaluate information and research and act on conclusions
			Works Independently	Organise commitments to meet deadlines without supervision
	6	R		Adapt and operate beyond my comfort zone
				Act on instructions received
		o⊄	Displays Cultural Competence	Respect and embrace diverse perspectives
		R.		Understand other cultures and engage appropriately
		1 11 1		Be responsible and manage behaviour
			Acts Responsibly	Respond proactively
	Q	£Ô3		Honour promises
	0	Ĩ		Avoid making excuses
				Accept responsibility for projects and results
	•	\bigcirc	Solves Problems	Identify underlying causes of problems
	9	(?)		Collaborate to solve problems
		\smile		Reframe problems as opportunities
	10	Г <u> </u> Ъ	Communicates Effectively in Writing	Use written language appropriately
	10			Apply appropriate tone and style
				Read and understand information



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