

**SHORT TERM SCIENTIFIC MISSION (STSM) SCIENTIFIC REPORT:
QUANTITATIVE RESEARCH ANALYSIS
COST ACTION: CA15221**

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1. Introduction: Purpose of the STSM & Working Procedure

The purpose of the STSM was to analyze survey data from stellar colleagues, collected as part of COST Action 15221, Advancing effective institutional models towards cohesive teaching, learning, research and writing development.” The STSM contributed to the fulfillment of two research objectives of MoU:

1. “Co-ordinate the collation and cross tabulation of data gathered from key informants in order to identify the common ground that exists in terms of positive development and performance through purposes, processes, knowledge/scholarship, skills development and values, across the four areas of teaching, learning, research and writing”
2. “Consider and propose, mindful of the insights provided from the analysis of data and taking into account existing models, what alternative centrally provided models and practices might best support the effective, successful and productive development of learning, teaching, research and writing.”

The statistical analysis performed on the data answered the following questions:

- RQ1. What is common across the data - what are the common and most predominant characteristics and behaviours of stellar colleagues?
- RQ2: What is the support they find most useful?
- RQ3: What are the overlaps between supports?
- RQ4: What model of centralised support would be best for stellar colleagues?

The STSM work was carried out at the University of Warsaw, Poland, with close collaboration of Prof. Maria Zaleska, full member of the COST Action. Work involved statistical analysis of survey data from 263 participants, who answered a self-report questionnaire designed for the purpose of the action. The questionnaire included 6 Sections and 36 questions in total. Open ended questions were excluded from the analysis. The first stage of data analysis involved cleaning up the data, identifying missing data (and recording them as such) and recoding of items (when required). The SPSS data set was compared to the Excel File to ensure correct data entry (or recoding) as required.

Descriptive analyses were performed on each question, and detailed report was provided on frequencies (percentages), means and standard deviations. Results obtained from this type of analysis provided a general overview of the participants characteristics and behaviors, as well as the possibility to compare answers from different sections, e.g., perceptions of the strongest barriers, the most useful forms of support for each area, the strongest types of motivation etc.

Correlation analyses were also performed in order to identify trends within the data. This type of analysis identified relationships between the self-perceptions of success in Teaching, Learning, Research and Writing (Item: I identify myself as a successful teacher/learner/ researcher/ writer) and Motivations, Barriers, Types of Support, Personality traits etc. Correlations were particularly examined in terms of trends or commonalities between the four areas.

Preliminary results were discussed with Prof. Zaleska particularly in terms of how they relate to the purpose of the Action and the specific research questions. The discussion focused on the ways results might be interpreted and the implications they might have in suggesting models of support within Institutions.

2. Statistical Analyses and Results

2.1. Sample Characteristics

Tables from 1-6 show sample composition characteristics in terms of gender distribution, academic qualifications, years of employment, career stage, mobility across institutions, institution characteristics (public/private).

Table 1: Gender Distribution

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	114	43.3	45.2	45.2
Female	137	52.1	54.4	99.6
Valid Rather not disclose	1	.4	.4	100.0
Total	252	95.8	100.0	
Missing System	11	4.2		
Total	263	100.0		

Table 2: Academic Qualifications

	Frequency	Percent	Valid Percent	Cumulative Percent
Bachelor degree	3	1.1	1.2	1.2
Masters	12	4.6	4.8	6.0
Valid PhD/Doctoral level education	163	62.0	64.9	70.9
Habilitation	67	25.5	26.7	97.6
Other	6	2.3	2.4	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 3: Career stage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Early career researcher (pre-doctorate, 1-7 years postdoctorate and/or 1-7 years higher education experience)	39	14.8	15.5	15.5
	Consolidator (7-12 years higher education experience and/or 7-12 years postdoctorate)	42	16.0	16.7	32.1
	Expert (12+ higher education experience)	171	65.0	67.9	100.0
	Total	252	95.8	100.0	
Missing	System	11	4.2		
Total		263	100.0		

Table 4: Public/ Private Institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public - largely publicly funded	221	84.0	88.8	88.8
	Private - largely privately funded	28	10.6	11.2	100.0
	Total	249	94.7	100.0	
Missing	System	14	5.3		
Total		263	100.0		

Table 5: Length of time at current institution

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1-3 years	23	8.7	9.1	9.1
4-7 years	31	11.8	12.3	21.3
8-12 years	56	21.3	22.1	43.5
13-17 years	32	12.2	12.6	56.1
18+ years	111	42.2	43.9	100.0
Total	253	96.2	100.0	
Missing System	10	3.8		
Total	263	100.0		

Table 6: Work in other higher education institutions

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	143	54.4	56.7	56.7
No	109	41.4	43.3	100.0
Total	252	95.8	100.0	
Missing System	11	4.2		
Total	263	100.0		

2.2. Perceptions of success as teacher, writer, learner, researcher

Tables 7-11 indicate the distribution of answers as regards the extent to which self-perceptions of being a successful writer, teacher, learner or researcher or manager. As could be noted in the respective tables (Valid Percentage column, figures in red) the area of Learning has the greatest number of participants rating themselves 4-5 (88% of participants), while the lowest percentage of 4-5 answers, is noted in Management, 62.9%.

Table 12 indicates correlation analyses between self-perceptions as a successful teacher, writer, learner, researcher and manager. As could be noted in the table, all areas are related to each other. However the strongest correlations were revealed between the roles of writer and researcher (Pearson $r = .67$, $p < .01$), teacher and learner (Pearson $r = .46$, $p < .01$).

Table 7: I identify myself as successful writer

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	4	1.5	1.6	1.6
2	13	4.9	5.2	6.7
Valid 3	61	23.2	24.2	31.0
4	122	46.4	48.4	79.4
Strongly agree	52	19.8	20.6	100.0
Total	252	95.8	100.0	
Missing System	11	4.2		
Total	263	100.0		

Table 8: I identify myself as a successful researcher

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	3	1.1	1.2	1.2
2	15	5.7	6.0	7.1
Valid 3	54	20.5	21.4	28.6
4	118	44.9	46.8	75.4
Strongly agree	62	23.6	24.6	100.0
Total	252	95.8	100.0	
Missing System	11	4.2		
Total	263	100.0		

Table 9: I identify myself as a successful teacher

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	3	1.1	1.2	1.2
2	3	1.1	1.2	2.4
Valid 3	28	10.6	11.1	13.5
4	106	40.3	42.1	55.6
Strongly agree	112	42.6	44.4	100.0
Total	252	95.8	100.0	
Missing System	11	4.2		
Total	263	100.0		

Table 10: I identify myself as a successful learner

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	1	.4	.4	.4
2	3	1.1	1.2	1.6
3	25	9.5	9.9	11.5
Valid 4	118	44.9	46.8	58.3
Strongly agree	105	39.9	41.7	100.0
Total	252	95.8	100.0	
Missing System	11	4.2		
Total	263	100.0		

Table 11: I identify myself as a successful manager

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	5	1.9	2.0	2.0
2	20	7.6	8.0	10.0
3	68	25.9	27.1	37.1
Valid 4	101	38.4	40.2	77.3
Strongly agree	57	21.7	22.7	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 12: Correlations between perceptions of success across the 5 areas

		I identify myself as a successful writer	I identify myself as a successful researcher	I identify myself as a successful teacher	I identify myself as a successful learner	I identify myself as a successful manager
I identify myself as a successful writer	Pearson Correlation	1	<u>.665**</u>	.335**	.423**	.272**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	252	252	251	251	250
I identify myself as a successful researcher	Pearson Correlation	.665**	1	.300**	.412**	.152*
	Sig. (2-tailed)	.000		.000	.000	.016

	N	252	252	251	251	250
I identify myself as a successful teacher	Pearson	.335**	.300**	1	.455**	.312**
	Correlation					
	Sig. (2-tailed)	.000	.000		.000	.000
	N	251	251	252	251	251
I identify myself as a successful learner	Pearson	.423**	.412**	.455**	1	.365**
	Correlation					
	Sig. (2-tailed)	.000	.000	.000		.000
	N	251	251	251	252	250
I identify myself as a successful manager	Pearson	.272**	.152*	.312**	.365**	1
	Correlation					
	Sig. (2-tailed)	.000	.016	.000	.000	
	N	250	250	251	250	251

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

2.3. Support for teaching, learning, research, writing

As regards reporting on existing support, Tables 13-16 indicate answers of participants across all areas, writing, research, teaching/learning and professional development. As can be noted, the presence of support is poorest for Writing: 23%; more extended for Research 38%; while Teaching & learning support at the extent of 31.6% and professional development 35%. To be noted is the percentage of individuals answering “Difficult to say”, which varies from 1/5 to 1/3 of the sample reporting so across the different areas. Cross-tabulation between Supports across different areas indicated that institutions providing one type of support e.g., Writing support were more likely to provide other types of support too, e.g., Research support, Teaching and learning etc. (Chi Square value was significant at $p < .001$.) The detailed cross-tabulations are indicated in Tables 17-22.

Table 13. Writing/publishing support for staff

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	58	22.1	23.0	23.0
No	133	50.6	52.8	75.8
Valid Difficult to say	61	23.2	24.2	100.0
Total	252	95.8	100.0	
Missing System	11	4.2		
Total	263	100.0		

Table 14. Teaching and learning support

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	80	30.4	31.6	31.6
No	116	44.1	45.8	77.5
Valid Difficult to say	57	21.7	22.5	100.0
Total	253	96.2	100.0	
Missing System	10	3.8		
Total	263	100.0		

Table 15. Research support for staff?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	96	36.5	38.1	38.1
No	91	34.6	36.1	74.2
Valid Difficult to say	65	24.7	25.8	100.0
Total	252	95.8	100.0	
Missing System	11	4.2		
Total	263	100.0		

Table 16. Professional development and/or staff training and development?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	89	33.8	35.2	35.2
No	89	33.8	35.2	70.4
Valid Difficult to say	75	28.5	29.6	100.0
Total	253	96.2	100.0	
Missing System	10	3.8		
Total	263	100.0		

Table 17. Cross-tabulations: Overlap between Writing/publishing support for staff? * Teaching and learning support

		Teaching and learning support (for example through a teaching and learning centre which aims primarily to support staff as teachers)?			Total
		Yes	No	Difficult to say	
Writing/publishing support for staff?	Yes	42	6	10	58
	No	19	91	23	133
	Difficult to say	18	19	24	61
Total		79	116	57	252

Table 18. Cross-tabulations: Writing/publishing support for staff? * Research support for staff?

		Research support for staff?			Total
		Yes	No	Difficult to say	
Writing/publishing support for staff?	Yes	44	5	9	58
	No	29	78	26	133
	Difficult to say	22	8	30	60
Total		95	91	65	251

Table 19. Cross-tabulation: Writing/publishing support for staff? * Professional development and/or staff training

Count

		Professional development and/or staff training and development?			Total
		Yes	No	Difficult to say	
Writing/publishing support for staff?	Yes	39	5	14	58
	No	26	71	36	133
	Difficult to say	23	13	25	61
Total		88	89	75	252

Table 20. Cross-tabulation: Research support for staff? * Teaching and learning support

		Teaching and learning support			Total
		Yes	No	Difficult to say	
Research support for staff?	Yes	50	28	18	96
	No	10	67	14	91
	Difficult to say	20	21	24	65
Total		80	116	56	252

Table 21. Crosstabulation: Research support*Professional development

		Professional development and/or staff training and development?			Total
		Yes	No	Difficult to say	
Research support for staff?	Yes	57	19	20	96
	No	13	58	20	91
	Difficult to say	18	12	35	65
Total		88	89	75	252

Table 22: Cross tabulation: Teaching and learning support * Professional development and/or staff training and development?

		Professional development and/or staff training and development?			Total
		Yes	No	Difficult to say	
Teaching and learning support (for example through a teaching and learning centre which aims primarily to support staff as teachers)?	Yes	52	9	19	80
	No	21	68	27	116
	Difficult to say	16	12	29	57
Total		89	89	75	253

Independent samples t-tests were conducted to assess whether there was any difference in self-perceptions of success across the four areas between the two categories: 1. those reporting the existence of support and 2. Those reporting no support (YES_NO Centralized support). Results showed no significant differences in self perception of success between those receiving centralized writing/teaching/research support and those not receiving support (p value >.05). Tables 23-25 indicate group statistics; as observed the values for means in each case are highly similar between YES-NO sub-groups.

Table 23: Group Statistics-Writing Support

		Writing/publishing support for staff?	N	Mean	Std. Deviation	Std. Error Mean
I identify myself as successful writer	Yes		57	3.9123	.78560	.10406
	No		133	3.7368	.90365	.07836
I identify myself as a successful researcher	Yes		57	3.8596	.85437	.11316
	No		133	3.8797	.88795	.07699
I identify myself as a successful teacher	Yes		58	4.3793	.61637	.08093
	No		132	4.1591	.92323	.08036

Table 24: Group Statistics: Teaching and learning support

	Teaching and learning support	N	Mean	Std. Deviation	Std. Error Mean
I identify myself as successful writer	Yes	79	3.8861	.89137	.10029
	No	116	3.7931	.85990	.07984
I identify myself as a successful researcher	Yes	79	3.8861	.93353	.10503
	No	116	3.9397	.83706	.07772
I identify myself as a successful teacher	Yes	80	4.3875	.73766	.08247
	No	115	4.2087	.83241	.07762

Table 25: Group Statistics: Research support

	Research support for staff?	N	Mean	Std. Deviation	Std. Error Mean
I identify myself as successful writer	Yes	95	3.8842	.87352	.08962
	No	91	3.7253	.87007	.09121
I identify myself as a successful researcher	Yes	95	3.9053	.87609	.08988
	No	91	3.8791	.92898	.09738
I identify myself as a successful teacher	Yes	96	4.3125	.74428	.07596
	No	90	4.2444	.75418	.07950

2.4. *Barriers to writing*

As regards barriers to writing, the strongest barrier reported was “Other workload”, (Mean=3.49) reported on the highest end (scores 4-5) by 55% of the sample and “Lack of time” (Mean=3.44) reported by 53% of the sample. The weakest barrier was Dislike of Writing (8.9% of the sample reported 4-5 on this item. Tables 26- provide detailed frequencies and percentages for each barrier. Nonetheless correlation analyses conducted afterwards between specific barriers and self-identification as a successful writer revealed a different picture. Results showed no significant correlations with ‘Other workload’ or ‘Lack of time’ but two significant negative relationships with ‘Lack of confidence about my writing” ($r=-.36$, $p<.01$) and ‘Dislike of writing’ ($p=-.32$, $p<.01$).

Table 26. Barriers: Other workload e.g. teaching, admin

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	19	7.2	7.6	7.6
2	46	17.5	18.3	25.9
Valid 3	47	17.9	18.7	44.6
4	71	27.0	28.3	72.9
significant barriers	68	25.9	27.1	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 27. Barriers: Dislike of writing

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	136	51.7	55.1	55.1
2	50	19.0	20.2	75.3
Valid 3	39	14.8	15.8	91.1
4	12	4.6	4.9	96.0
significant barriers	10	3.8	4.0	100.0
Total	247	93.9	100.0	
Missing System	16	6.1		
Total	263	100.0		

Table 28. Barriers: Lack of reward for my writing from my institution

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	81	30.8	32.3	32.3
2	47	17.9	18.7	51.0
Valid 3	53	20.2	21.1	72.1
4	37	14.1	14.7	86.9
significant barriers	33	12.5	13.1	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 29. Barriers: Lack of time generally

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	19	7.2	7.6	7.6
2	37	14.1	14.8	22.4
Valid 3	61	23.2	24.4	46.8
4	81	30.8	32.4	79.2
significant barriers	52	19.8	20.8	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 30. Barriers: Inadequate language skills

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	125	47.5	50.0	50.0
2	50	19.0	20.0	70.0
Valid 3	47	17.9	18.8	88.8
4	23	8.7	9.2	98.0
significant barriers	5	1.9	2.0	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 31. Barriers: Lack of confidence about my writing

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	123	46.8	49.6	49.6
2	70	26.6	28.2	77.8
Valid 3	42	16.0	16.9	94.8
4	10	3.8	4.0	98.8
significant barriers	3	1.1	1.2	100.0
Total	248	94.3	100.0	
Missing System	15	5.7		
Total	263	100.0		

Table 32. Barriers: Lack of recognition of my writing by my institution

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	109	41.4	43.8	43.8
2	58	22.1	23.3	67.1
Valid 3	47	17.9	18.9	85.9
4	27	10.3	10.8	96.8
significant barriers	8	3.0	3.2	100.0
Total	249	94.7	100.0	
Missing System	14	5.3		
Total	263	100.0		

Table 33. Barriers: Personal/professional disagreement with ‘publish or perish’ mentality

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	81	30.8	32.5	32.5
2	62	23.6	24.9	57.4
Valid 3	79	30.0	31.7	89.2
4	16	6.1	6.4	95.6
significant barriers	11	4.2	4.4	100.0
Total	249	94.7	100.0	
Missing System	14	5.3		
Total	263	100.0		

Table 34. Barriers: Lack of institutional support

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	67	25.5	26.9	26.9
2	51	19.4	20.5	47.4
Valid 3	49	18.6	19.7	67.1
4	44	16.7	17.7	84.7
significant barriers	38	14.4	15.3	100.0
Total	249	94.7	100.0	
Missing System	14	5.3		
Total	263	100.0		

Table 35. Barriers: Lack of formal writing training

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	89	33.8	35.9	35.9
2	51	19.4	20.6	56.5
Valid 3	54	20.5	21.8	78.2
4	30	11.4	12.1	90.3
significant barriers	24	9.1	9.7	100.0
Total	248	94.3	100.0	
Missing System	15	5.7		
Total	263	100.0		

Table 36 Barriers: Lack of a network of writers

	Frequency	Percent	Valid Percent	Cumulative Percent
quite manageable challenges	79	30.0	31.6	31.6
2	57	21.7	22.8	54.4
Valid 3	63	24.0	25.2	79.6
4	30	11.4	12.0	91.6
significant barriers	21	8.0	8.4	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 37. Summary: Means and standard deviations for barriers to Writing

	N	Mean	Std. Deviation	Std. Error Mean
Other workload e.g. teaching	251	3.49	1.272	.080
Lack of time generally	250	3.44	1.192	.075
Inadequate language skills	250	1.93	1.112	.070
Lack of confidence about my writing	248	1.79	.946	.060
Lack of recognition of my writing by my institution	249	2.06	1.162	.074

Lack of reward for my writing from my institution	251	2.58	1.407	.089
Personal/ professional disagreement with ‘publish or perish’ mentality	249	2.25	1.113	.071
Dislike of writing	247	1.83	1.114	.071
Lack of institutional support	249	2.74	1.417	.090
Lack of formal writing training	248	2.39	1.336	.085
Lack of a network of writers	250	2.43	1.276	.081

2.5.Motivation on Writing

As regards Motivation on Writing, Tables 38-47 indicate the distribution of answers on the various types of motivation. The high impact end (scores 4-5) has been highlighted in red on each table. Passion for the discipline holds the highest scores (Mean=4.02), as 74% rated this motivator 4/5. The other 3 motivators have very similar mean scores and percentages a. ‘The wish to advance my career’ (Mean=3.78 and 62% of the sample rated 4/5) b. ‘Wish to be recognized in the field’ (Mean=3.72) 63%) and c. ‘Desire to share your work’ (Mean=3.76; 64% of the sample). But correlations reveal that self-identification as a successful writer most strongly relates to “The wish to be recognized in the field $r = .20$, $p < .01$. The 3 factors identified above also have significant correlations but weak ones (varying from $r = .10$ to $r = .14$, $p < .05$).

Table 38. Motivation on writing: The support of colleagues

	Frequency	Percent	Valid Percent	Cumulative Percent
hardly any impact	41	15.6	16.3	16.3
2	49	18.6	19.5	35.9
Valid 3	57	21.7	22.7	58.6
4	64	24.3	25.5	84.1
impact hugely	40	15.2	15.9	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 39. Motivation on writing: The opportunity to co-author

	Frequency	Percent	Valid Percent	Cumulative Percent
hardly any impact	31	11.8	12.4	12.4
2	44	16.7	17.5	29.9
Valid 3	47	17.9	18.7	48.6
4	72	27.4	28.7	77.3
impact hugely	57	21.7	22.7	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 40. Motivation on writing: Passion for your discipline

	Frequency	Percent	Valid Percent	Cumulative Percent
hardly any impact	14	5.3	5.6	5.6
2	17	6.5	6.8	12.4
Valid 3	33	12.5	13.1	25.5
4	72	27.4	28.7	54.2
impact hugely	115	43.7	45.8	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 41. Motivation on writing: Desire to share your work

	Frequency	Percent	Valid Percent	Cumulative Percent
hardly any impact	22	8.4	8.8	8.8
2	16	6.1	6.4	15.2
Valid 3	52	19.8	20.8	36.0
4	70	26.6	28.0	64.0
impact hugely	90	34.2	36.0	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 42. Motivation on writing: Belief that your writing can make a difference

	Frequency	Percent	Valid Percent	Cumulative Percent
hardly any impact	16	6.1	6.4	6.4
2	22	8.4	8.8	15.3
Valid 3	70	26.6	28.1	43.4
4	73	27.8	29.3	72.7
impact hugely	68	25.9	27.3	100.0
Total	249	94.7	100.0	
Missing System	14	5.3		
Total	263	100.0		

Table 43. Motivation on writing: Desire to learn more about my work

	Frequency	Percent	Valid Percent	Cumulative Percent
hardly any impact	13	4.9	5.2	5.2
2	24	9.1	9.6	14.8
Valid 3	70	26.6	28.0	42.8
4	71	27.0	28.4	71.2
impact hugely	72	27.4	28.8	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 44. Motivation on writing: The obligation to publish as a requirement

	Frequency	Percent	Valid Percent	Cumulative Percent
hardly any impact	24	9.1	9.6	9.6
2	35	13.3	13.9	23.5
Valid 3	72	27.4	28.7	52.2
4	58	22.1	23.1	75.3
impact hugely	62	23.6	24.7	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 45. Motivation on writing: The wish to be recognised in the field

	Frequency	Percent	Valid Percent	Cumulative Percent
hardly any impact	17	6.5	6.8	6.8
2	26	9.9	10.4	17.1
Valid 3	51	19.4	20.3	37.5
4	73	27.8	29.1	66.5
impact hugely	84	31.9	33.5	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 46. Motivation on writing: The wish to advance my career

	Frequency	Percent	Valid Percent	Cumulative Percent
hardly any impact	22	8.4	8.8	8.8
2	17	6.5	6.8	15.6
Valid 3	55	20.9	22.0	37.6
4	57	21.7	22.8	60.4
impact hugely	99	37.6	39.6	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 47. Motivation on writing: Motivation for writing

	N	Mean	Std. Deviation	Std. Error Mean
The support of colleagues	251	3.05	1.321	.083
The opportunity to co-author	251	3.32	1.330	.084
Passion for your discipline	251	4.02	1.169	.074
Desire to share your work	250	3.76	1.251	.079
Belief that your writing can make a difference	249	3.62	1.161	.074
Desire to learn more about my work; writing for professional understanding	250	3.66	1.144	.072

The obligation to publish as a requirement around funding secured	251	3.39	1.262	.080
The wish to be recognised in the field	251	3.72	1.221	.077
The wish to advance my career	250	3.78	1.279	.081

2.6. Writing Support

Tables 48-63 show answer distributions for each type of writing support and the final table (Table 63) a summary for all items. Results show that the most useful support for writing was ‘Access to relevant literature’ (Mean=4.3); 78% of participants checked this item as 4 or 5. The second most highly rated support was ‘Structured Feedback’ (Mean=3.75) also checked as 4 or 5 by 68% of the sample. ‘Dedicated long blocks’ and ‘Editor corrections/services’ were rated highly similar (Mean= 3.7), and checked 4 or 5 by 60% of the sample. Correlation analyses showed that self-perceptions as a successful writer only correlated significantly with ‘Access to relevant literature’, $r=.18$, $p < .01$.

Table 48. Writing support: Writing workshops, courses, lectures

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	25	9.5	10.2	10.2
2	27	10.3	11.0	21.1
Valid 3	58	22.1	23.6	44.7
4	67	25.5	27.2	72.0
most useful	69	26.2	28.0	100.0
Total	246	93.5	100.0	
Missing System	17	6.5		
Total	263	100.0		

Table 49. Writing support: Mentoring

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	18	6.8	7.3	7.3
2	19	7.2	7.7	15.0
Valid 3	62	23.6	25.1	40.1
4	63	24.0	25.5	65.6
most useful	85	32.3	34.4	100.0
Total	247	93.9	100.0	
Missing System	16	6.1		
Total	263	100.0		

Table 50. Writing support: Writing Groups

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	35	13.3	14.5	14.5
2	41	15.6	17.0	31.5
Valid 3	74	28.1	30.7	62.2
4	64	24.3	26.6	88.8
most useful	27	10.3	11.2	100.0
Total	241	91.6	100.0	
Missing System	22	8.4		
Total	263	100.0		

Table 51. Writing support: Structured feedback

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	5	1.9	2.0	2.0
2	19	7.2	7.7	9.7
Valid 3	55	20.9	22.2	31.9
4	82	31.2	33.1	64.9
most useful	87	33.1	35.1	100.0
Total	248	94.3	100.0	
Missing System	15	5.7		
Total	263	100.0		

Table 52. Writing support: Reading Circles

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	35	13.3	14.5	14.5
2	51	19.4	21.1	35.5
Valid 3	86	32.7	35.5	71.1
4	40	15.2	16.5	87.6
most useful	30	11.4	12.4	100.0
Total	242	92.0	100.0	
Missing System	21	8.0		
Total	263	100.0		

Table 53. Writing support: Dedicated short blocks

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	20	7.6	8.1	8.1
2	30	11.4	12.1	20.2
Valid 3	85	32.3	34.3	54.4
4	62	23.6	25.0	79.4
most useful	51	19.4	20.6	100.0
Total	248	94.3	100.0	
Missing System	15	5.7		
Total	263	100.0		

Table 54. Writing support: Dedicated long blocks

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	17	6.5	6.9	6.9
2	22	8.4	8.9	15.8
Valid 3	60	22.8	24.3	40.1
4	59	22.4	23.9	64.0
most useful	89	33.8	36.0	100.0
Total	247	93.9	100.0	
Missing System	16	6.1		
Total	263	100.0		

Table 55. Writing support: Access to relevant literature

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	3	1.1	1.2	1.2
2	5	1.9	2.0	3.2
Valid 3	45	17.1	18.1	21.3
4	62	23.6	24.9	46.2
most useful	134	51.0	53.8	100.0
Total	249	94.7	100.0	
Missing System	14	5.3		
Total	263	100.0		

Table 56. Writing support: Editor corrections/services

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	13	4.9	5.3	5.3
2	29	11.0	11.8	17.1
Valid 3	56	21.3	22.9	40.0
4	67	25.5	27.3	67.3
most useful	80	30.4	32.7	100.0
Total	245	93.2	100.0	
Missing System	18	6.8		
Total	263	100.0		

Table 57. Writing support: English language support

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	30	11.4	12.1	12.1
2	21	8.0	8.5	20.6
Valid 3	52	19.8	21.0	41.5
4	60	22.8	24.2	65.7
most useful	85	32.3	34.3	100.0
Total	248	94.3	100.0	
Missing System	15	5.7		
Total	263	100.0		

Table 58. Writing support: Training in supervising others

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	19	7.2	7.7	7.7
2	36	13.7	14.6	22.3
Valid 3	65	24.7	26.3	48.6
4	76	28.9	30.8	79.4
most useful	51	19.4	20.6	100.0
Total	247	93.9	100.0	
Missing System	16	6.1		
Total	263	100.0		

Table 59. Writing support: Training in working as part of an editorial board

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	23	8.7	9.3	9.3
2	31	11.8	12.6	21.9
Valid 3	68	25.9	27.5	49.4
4	79	30.0	32.0	81.4
most useful	46	17.5	18.6	100.0
Total	247	93.9	100.0	
Missing System	16	6.1		
Total	263	100.0		

Table 60. Writing support: Tailored support in writing for mainstream

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	45	17.1	18.6	18.6
2	49	18.6	20.2	38.8
Valid 3	75	28.5	31.0	69.8
4	47	17.9	19.4	89.3
most useful	26	9.9	10.7	100.0
Total	242	92.0	100.0	
Missing System	21	8.0		
Total	263	100.0		

Table 61. Writing support: Social media writing training

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	72	27.4	29.5	29.5
2	46	17.5	18.9	48.4
Valid 3	68	25.9	27.9	76.2
4	37	14.1	15.2	91.4
most useful	21	8.0	8.6	100.0
Total	244	92.8	100.0	
Missing System	19	7.2		
Total	263	100.0		

Table 62. Writing support: Communications/media skills training

	Frequency	Percent	Valid Percent	Cumulative Percent
least useful	66	25.1	27.6	27.6
2	47	17.9	19.7	47.3
Valid 3	59	22.4	24.7	72.0
4	46	17.5	19.2	91.2
most useful	21	8.0	8.8	100.0
Total	239	90.9	100.0	
Missing System	24	9.1		
Total	263	100.0		

Table 63. Summary Writing support

	N	Minimum	Maximum	Mean	Std. Deviation
Writing workshops, courses, lectures	246	1.00	5.00	3.5203	1.28317
Reading Circles	242	1.00	5.00	2.9132	1.20369
Dedicated short blocks	248	1.00	5.00	3.3790	1.17389
Dedicated long blocks	247	1.00	5.00	3.7328	1.23032
Access to relevant literature	249	1.00	5.00	4.2811	.91211
Editor corrections/services	245	1.00	5.00	3.7020	1.19296
English language support	248	1.00	5.00	3.6008	1.35198
Training in supervising others	247	1.00	5.00	3.4211	1.18974

Training in working as part of an editorial board	247	1.00	5.00	3.3806	1.19318
Training in publishing	241	1.00	5.00	3.3693	1.21129
Tailored support in writing for mainstream	242	1.00	5.00	2.8347	1.24472
Social media writing training	244	1.00	5.00	2.5451	1.29020
Communications/media skills training	239	1.00	5.00	2.6192	1.30666
Mentoring	247	1.00	5.00	3.7206	1.21930
Valid N (listwise)	225				

2.7. Motivation to Research and Research Collaborators

Tables 64 to 74 present answers for each item assessing motivation to research. Items rated as most influential include: ‘Intrinsic motivation’ (Mean=4.7; 94% of the sample rated the item 4 or 5), ‘Desire to learn more’ (Mean=4.4; 86% of the sample rated the item 4 or 5), ‘Desire to progress the field’ (Mean= 4.3; 84% rated the item as 4 or 5). Self perceptions as a successful research had significant correlations with the following items:

- A. Desire to progress the field ($r=.34, p<.01$)
- B. Sense of competition within my field ($r=.20, p<.01$)
- C. Desire to learn more ($r=.21, p<.01$)
- D. Desire to improve the quality of my teaching ($r=.17, p<.01$).

Self-perception of being a successful researcher did not show any significant correlations with Intrinsic motivation.

Table 64. Motivation to research: Intrinsic motivation

	Frequency	Percent	Valid Percent	Cumulative Percent
2	3	1.1	1.2	1.2
3	13	4.9	5.2	6.4
Valid 4	39	14.8	15.6	22.0
is very influential	195	74.1	78.0	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 65. Motivation to research: Institutional demands

	Frequency	Percent	Valid Percent	Cumulative Percent
is not at all influential	13	4.9	5.2	5.2
2	28	10.6	11.3	16.5
Valid 3	76	28.9	30.6	47.2
4	89	33.8	35.9	83.1
is very influential	42	16.0	16.9	100.0
Total	248	94.3	100.0	
Missing System	15	5.7		
Total	263	100.0		

Table 66. Motivation to research: Desire to progress the field

	Frequency	Percent	Valid Percent	Cumulative Percent
is not at all influential	3	1.1	1.2	1.2
2	5	1.9	2.0	3.2
Valid 3	32	12.2	12.9	16.1
4	79	30.0	31.7	47.8
is very influential	130	49.4	52.2	100.0
Total	249	94.7	100.0	
Missing System	14	5.3		
Total	263	100.0		

Table 67. Motivation to research: Job security

	Frequency	Percent	Valid Percent	Cumulative Percent
is not at all influential	23	8.7	9.3	9.3
2	24	9.1	9.8	19.1
Valid 3	65	24.7	26.4	45.5
4	88	33.5	35.8	81.3
is very influential	46	17.5	18.7	100.0
Total	246	93.5	100.0	
Missing System	17	6.5		
Total	263	100.0		

Table 68. Motivation to research: Recognition by my institution

	Frequency	Percent	Valid Percent	Cumulative Percent
is not at all influential	13	4.9	5.2	5.2
2	32	12.2	12.9	18.1
Valid 3	62	23.6	24.9	43.0
4	89	33.8	35.7	78.7
is very influential	53	20.2	21.3	100.0
Total	249	94.7	100.0	
Missing System	14	5.3		
Total	263	100.0		

Table 69. Motivation to research: Industry needs

	Frequency	Percent	Valid Percent	Cumulative Percent
is not at all influential	69	26.2	27.8	27.8
2	35	13.3	14.1	41.9
Valid 3	66	25.1	26.6	68.5
4	59	22.4	23.8	92.3
is very influential	19	7.2	7.7	100.0
Total	248	94.3	100.0	
Missing System	15	5.7		
Total	263	100.0		

Table 70. Motivation to research: Sense of competition within my field

	Frequency	Percent	Valid Percent	Cumulative Percent
is not at all influential	34	12.9	13.6	13.6
2	30	11.4	12.0	25.6
Valid 3	76	28.9	30.4	56.0
4	65	24.7	26.0	82.0
is very influential	45	17.1	18.0	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 71. Motivation to research: Desire to learn more

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	is not at all influential	1	.4	.4
	2	7	2.7	3.2
	3	26	9.9	13.6
	4	79	30.0	45.2
	is very influential	137	52.1	100.0
	Total	250	95.1	100.0
Missing	System	13	4.9	
Total		263	100.0	

Table 72. Motivation to research: Desire to improve the quality of my teaching

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	is not at all influential	9	3.4	3.6
	2	16	6.1	10.0
	3	46	17.5	28.5
	4	77	29.3	59.4
	is very influential	101	38.4	100.0
	Total	249	94.7	100.0
Missing	System	14	5.3	
Total		263	100.0	

Table 73. Motivation to research: Opportunity to collaborate with colleagues

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	is not at all influential	11	4.2	4.4
	2	10	3.8	8.4
	3	46	17.5	26.9
	4	94	35.7	64.7
	is very influential	88	33.5	100.0
	Total	249	94.7	100.0
Missing	System	14	5.3	
Total		263	100.0	

Table 74. Motivation to research: Mobility: Opportunity to travel

	Frequency	Percent	Valid Percent	Cumulative Percent
is not at all influential	15	5.7	6.0	6.0
2	23	8.7	9.2	15.2
Valid 3	46	17.5	18.4	33.6
4	68	25.9	27.2	60.8
is very influential	98	37.3	39.2	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 75. Motivation to research: Connectedness/ part of professional community

	Frequency	Percent	Valid Percent	Cumulative Percent
is not at all influential	12	4.6	4.8	4.8
2	9	3.4	3.6	8.4
Valid 3	40	15.2	16.1	24.5
4	81	30.8	32.5	57.0
is very influential	107	40.7	43.0	100.0
Total	249	94.7	100.0	
Missing System	14	5.3		
Total	263	100.0		

Table 76. Motivation to research summary: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Intrinsic motivation	250	2.00	5.00	4.7040	.62123
Institutional demands	248	1.00	5.00	3.4798	1.06452
Desire to progress the field	249	1.00	5.00	4.3173	.86121
Job security	246	1.00	5.00	3.4472	1.17597
Recognition by my institution	249	1.00	5.00	3.5502	1.11735
Industry needs	248	1.00	5.00	2.6935	1.30820
Sense of competition within my field	250	1.00	5.00	3.2280	1.26428

Desire to learn more	250	1.00	5.00	4.3760	.81318
Desire to improve the quality of my teaching	249	1.00	5.00	3.9839	1.08497
The opportunity to collaborate with colleagues	249	1.00	5.00	3.9558	1.04826
Mobility – the opportunity to travel and working internationally	250	1.00	5.00	3.8440	1.21059
Connectedness – the desire to be part of professional/research community	249	1.00	5.00	4.0522	1.08197
Valid N (listwise)	240				

As regards types of collaborations, answers of participants are presented in Tables 77 to 82. Top 3 collaborators, checked by the sample include: Other academics (88.6%), international collaborators (68%) and doctoral candidates (64%)

Table 77. Research Collaboration: Other academic staff

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Other academic staff	233	88.6	100.0	100.0
Missing	30	11.4		
Total	263	100.0		

Table 78. Research Collaboration: Doctoral candidates

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Doctoral candidates	169	64.3	100.0	100.0
Missing	94	35.7		
Total	263	100.0		

Table 79. Research Collaboration: Masters students

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Masters students	118	44.9	100.0	100.0
Missing	145	55.1		
Total	263	100.0		

Table 80. Research Collaboration: Postdoctoral/early career investigators

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Postdoctoral colleagues and other early career investigators	139	52.9	100.0	100.0
Missing	124	47.1		
Total	263	100.0		

Table 81. Research Collaboration: International collaborators

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid International collaborators	179	68.1	100.0	100.0
Missing	84	31.9		
Total	263	100.0		

Table 82. Research Collaboration: National collaborators

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid National collaborators	145	55.1	100.0	100.0
Missing	118	44.9		
Total	263	100.0		

2.8. Research support

In terms of research support, specific results for each type of support are presented in Tables 83-90. A classification of top three supports includes: 1. Grant funding (reported by 66.5% of the sample) 2. Presenting results at international events (reported by 65% of the sample) 3. The opportunity to collaborate with others (reported by 58% of the sample). The type of support which could be classified as last was “Workshops/professional development on researching”-checked by only 33% of the sample.

Table 83. Research support: Grant funding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Grant funding	175	66.5	100.0	100.0
Missing		88	33.5		
Total		263	100.0		

Table 84. Research support: Release time to conduct research

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Release time to conduct research	116	44.1	100.0	100.0
Missing		147	55.9		
Total		263	100.0		

Table 85. Research support: Flexibility to adjust commitments to research, teaching, and service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Flexibility to adjust commitments to research, teaching, and service	120	45.6	100.0	100.0
Missing		143	54.4		
Total		263	100.0		

Table 86. Research support: Opportunities to collaborate with others

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Opportunities to collaborate with others (industry, academic or other the rend users)	152	57.8	100.0	100.0
Missing		111	42.2		
Total		263	100.0		

Table 87. Research support: Workshops/professional development on researching

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Workshops/professional development on researching	86	32.7	100.0	100.0
Missing	177	67.3		
Total	263	100.0		

Table 88. Research support: International professional development opportunities

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid International professional development opportunities	109	41.4	100.0	100.0
Missing	154	58.6		
Total	263	100.0		

Table 89. Research support: Presenting research results at international events

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Presenting research results at international events	170	64.6	100.0	100.0
Missing	93	35.4		
Total	263	100.0		

Table 90. Research support: Attending research-oriented events

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Attending research-oriented events	149	56.7	100.0	100.0
Missing	114	43.3		
Total	263	100.0		

2.9. Teaching Experiences: Training, Qualifications

Tables 91-94, show answer distributions for various teaching experiences. As can be noted, 61% of the sample reported receiving no initial teacher training (training before entering class for the first time), 67% reported no support on teaching during first year at the institution, and 40% reported lack of ongoing institutional support for teaching. Only 55% of the sample have a formal teaching qualification at the moment.

Table 91. Initial teacher training

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	68	25.9	27.1	27.1
Valid No	154	58.6	61.4	88.4
Valid Somewhat	29	11.0	11.6	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 92. Teaching qualification: formal recognition

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	138	52.5	54.8	54.8
Valid No	79	30.0	31.3	86.1
Valid Somewhat	35	13.3	13.9	100.0
Total	252	95.8	100.0	
Missing System	11	4.2		
Total	263	100.0		

Table 93. Institutional support during first year

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	49	18.6	19.6	19.6
Valid No	167	63.5	66.8	86.4
Valid Somewhat	34	12.9	13.6	100.0
Total	250	95.1	100.0	
Missing System	13	4.9		
Total	263	100.0		

Table 94. Ongoing institutional support for teaching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	79	30.0	31.7	31.7
	No	99	37.6	39.8	71.5
	Somewhat	71	27.0	28.5	100.0
Total		249	94.7	100.0	
Missing	System	14	5.3		
Total		263	100.0		

2.10. Factors important for teaching development

Tables 95-107 show answers of participants as regards factors relevant to teaching development. The top 3 factors checked by the greater majority of the sample include:

1. Feedback from students (Mean= 4.3; Reported 4 or 5 by 83% of the sample)
2. Student performance/student learning (Mean=3.9; Reported 4 or 5 by 67% of the sample);
3. Sharing pedagogic practice through informal professional conversations (Mean=3.8, Reported 4 or 5 by 67% of the sample).

Correlation analyses between self-perceptions as a successful teacher and the factors indicated: a. The strongest significant correlation between self-perception as a successful teacher and feedback/teaching evaluation from students ($r = .23, p < .01$).

b. Weak but still significant correlations between self-perception as a successful teacher and

- Engaging with the scholarship of teaching & learning/literature $r = .17, p < .01$

- Researching your teaching $r = .16, p < .05$

-International teaching opportunities $r = .13, p < .05$

Giving feedback/monitoring colleagues $r = .12, p < .05$

Table 95. Importance for teaching development: Feedback from your students

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	1	.4	.4	.4
2	3	1.1	1.2	1.6
Valid 3	38	14.4	15.1	16.7
4	91	34.6	36.3	53.0
most important	118	44.9	47.0	100.0
Total	251	95.4	100.0	
Missing System	12	4.6		
Total	263	100.0		

Table 96. Importance for teaching development: Feedback from colleagues

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	11	4.2	4.4	4.4
2	29	11.0	11.7	16.1
Valid 3	50	19.0	20.2	36.3
4	86	32.7	34.7	71.0
most important	72	27.4	29.0	100.0
Total	248	94.3	100.0	
Missing System	15	5.7		
Total	263	100.0		

Table 97. Importance for teaching development: Feedback colleagues

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	28	10.6	11.4	11.4
2	26	9.9	10.6	22.0
Valid 3	67	25.5	27.2	49.2
4	73	27.8	29.7	78.9
most important	52	19.8	21.1	100.0
Total	246	93.5	100.0	
Missing System	17	6.5		
Total	263	100.0		

Table 98. Importance for teaching development: Sharing pedagogic practice through informal professional conversations

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	16	6.1	6.4	6.4
2	12	4.6	4.8	11.2
Valid 3	53	20.2	21.3	32.5
4	86	32.7	34.5	67.1
most important	82	31.2	32.9	100.0
Total	249	94.7	100.0	
Missing System	14	5.3		
Total	263	100.0		

Table 99. Importance for teaching development: Attending teaching and learning workshops and seminars

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	34	12.9	13.8	13.8
2	28	10.6	11.4	25.2
Valid 3	54	20.5	22.0	47.2
4	60	22.8	24.4	71.5
most important	70	26.6	28.5	100.0
Total	246	93.5	100.0	
Missing System	17	6.5		
Total	263	100.0		

Table 100. Importance for teaching development: Contributing to teaching and learning workshops and seminars

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	38	14.4	15.5	15.5
2	23	8.7	9.4	24.9
Valid 3	57	21.7	23.3	48.2
4	68	25.9	27.8	75.9
most important	59	22.4	24.1	100.0
Total	245	93.2	100.0	
Missing System	18	6.8		
Total	263	100.0		

Table 101. Importance for teaching development: Awards and recognition

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	50	19.0	20.2	20.2
2	34	12.9	13.8	34.0
Valid 3	64	24.3	25.9	59.9
4	53	20.2	21.5	81.4
most important	46	17.5	18.6	100.0
Total	247	93.9	100.0	
Missing System	16	6.1		
Total	263	100.0		

Table 102. Importance for teaching development: Team-teaching opportunities

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	29	11.0	11.9	11.9
2	27	10.3	11.1	23.0
Valid 3	54	20.5	22.1	45.1
4	73	27.8	29.9	75.0
most important	61	23.2	25.0	100.0
Total	244	92.8	100.0	
Missing System	19	7.2		
Total	263	100.0		

Table 103. Importance for teaching development: International teaching opportunities

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	33	12.5	13.5	13.5
2	17	6.5	7.0	20.5
Valid 3	47	17.9	19.3	39.8
4	57	21.7	23.4	63.1
most important	90	34.2	36.9	100.0
Total	244	92.8	100.0	
Missing System	19	7.2		
Total	263	100.0		

Table 104. Importance for teaching development: Researching your teaching

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	32	12.2	13.1	13.1
2	22	8.4	9.0	22.1
Valid 3	52	19.8	21.3	43.4
4	65	24.7	26.6	70.1
most important	73	27.8	29.9	100.0
Total	244	92.8	100.0	
Missing System	19	7.2		
Total	263	100.0		

Table 105. Importance for teaching development: Engaging with the scholarship of teaching and learning

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	28	10.6	11.4	11.4
2	22	8.4	8.9	20.3
Valid 3	58	22.1	23.6	43.9
4	67	25.5	27.2	71.1
most important	71	27.0	28.9	100.0
Total	246	93.5	100.0	
Missing System	17	6.5		
Total	263	100.0		

Table 106. Importance for teaching development: Student performance

	Frequency	Percent	Valid Percent	Cumulative Percent
least important	12	4.6	4.9	4.9
2	15	5.7	6.1	11.0
Valid 3	54	20.5	22.0	32.9
4	64	24.3	26.0	58.9
most important	101	38.4	41.1	100.0
Total	246	93.5	100.0	
Missing System	17	6.5		
Total	263	100.0		

Table 107. Importance for teaching development: Summary of Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Feedback from students	251	1.00	5.00	4.2829	.79225
Feedback (teaching evaluation/review) from colleagues	248	1.00	5.00	3.7218	1.13431
Giving feedback on teaching to and/or mentoring other colleagues	246	1.00	5.00	3.3862	1.24918
Sharing pedagogic practice through informal professional conversations	249	1.00	5.00	3.8273	1.13517
Attending teaching and learning workshops	246	1.00	5.00	3.4228	1.37029
Contributing to teaching and learning workshops	245	1.00	5.00	3.3551	1.35518
Awards and recognition	247	1.00	5.00	3.0445	1.38298
Team-teaching (co-teaching) opportunities	244	1.00	5.00	3.4508	1.29959
International teaching opportunities	244	1.00	5.00	3.6311	1.38897
Researching your teaching	244	1.00	5.00	3.5123	1.35015
Engaging with the scholarship of teaching and learning	246	1.00	5.00	3.5325	1.30187
Student performance – student learning	246	1.00	5.00	3.9228	1.14559
Valid N (listwise)	238				

2.11. Impressions of Teaching

Tables 108-113 present participant answers on Teaching impressions. ‘Building rapport with my students is an important part of my teaching’ and ‘My research informs my teaching’ were the two items rated the highest by the largest majority of the sample. (They were rated as 4 or 5 by 75% of the sample, Mean=3.8). Second was rated: ‘Improving teaching and learning practices motivates my pursuit of research’ (66% of the sample; Mean=3.6). ‘I identify myself as a successful teacher’ correlates significantly with: a. Building rapport with my students is an important part of my teaching ($r=.25, p<.01$) b. Improving teaching and learning practices motivates my pursuit of research ($r=.16, p<.01$).

Table 108. Teaching impressions: I have become a better university teacher by teaching in different institutions in my home country

	Frequency	Percent	Valid Percent	Cumulative Percent
not applicable	65	24.7	24.8	24.8
strongly disagree	5	1.9	1.9	26.7
disagree	14	5.3	5.3	32.1
Valid uncertain	43	16.3	16.4	48.5
agree	66	25.1	25.2	73.7
strongly agree	69	26.2	26.3	100.0
Total	262	99.6	100.0	
Missing System	1	.4		
Total	263	100.0		

Table 109. Teaching impressions: I have become a better university teacher by teaching in international contexts

	Frequency	Percent	Valid Percent	Cumulative Percent
not applicable	67	25.5	25.6	25.6
strongly disagree	2	.8	.8	26.3
disagree	7	2.7	2.7	29.0
Valid uncertain	31	11.8	11.8	40.8
agree	65	24.7	24.8	65.6
strongly agree	90	34.2	34.4	100.0
Total	262	99.6	100.0	
Missing System	1	.4		
Total	263	100.0		

Table 110. Teaching impressions: My research informs my teaching practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not applicable	21	8.0	8.0	8.0
	strongly disagree	5	1.9	1.9	9.9
	disagree	9	3.4	3.4	13.4
	uncertain	30	11.4	11.5	24.8
	agree	92	35.0	35.1	59.9
	strongly agree	105	39.9	40.1	100.0
	Total	262	99.6	100.0	
	Missing System	1	.4		
Total		263	100.0		

Table 111. Teaching impressions: Improving teaching and learning practices motivates my pursuit of research

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not applicable	20	7.6	7.6	7.6
	strongly disagree	5	1.9	1.9	9.5
	disagree	16	6.1	6.1	15.6
	uncertain	48	18.3	18.3	34.0
	agree	92	35.0	35.1	69.1
	strongly agree	81	30.8	30.9	100.0
	Total	262	99.6	100.0	
	Missing System	1	.4		
Total		263	100.0		

Table 112. Teaching impressions: Building rapport with my students is an important part of my teaching

	Frequency	Percent	Valid Percent	Cumulative Percent
not applicable	24	9.1	9.2	9.2
strongly disagree	3	1.1	1.1	10.3
disagree	5	1.9	1.9	12.2
Valid uncertain	33	12.5	12.6	24.8
agree	95	36.1	36.3	61.1
strongly agree	102	38.8	38.9	100.0
Total	262	99.6	100.0	
Missing System	1	.4		
Total	263	100.0		

Table 113. Teaching Impressions Summary: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I have become a better university teacher by teaching in different institutions in my home country	262	.00	5.00	2.9427	1.91799
I have become a better university teacher by teaching in international contexts	262	.00	5.00	3.1260	1.99505
My research informs my teaching practices.	262	.00	5.00	3.8397	1.44539
Improving teaching and learning practices motivates my pursuit of research.	262	.00	5.00	3.6412	1.41729
Building rapport with my students is an important part of my teaching.	262	.00	5.00	3.8244	1.46207
Valid N (listwise)	262				

2.12. Learning Opportunities

Tables 114-130, show participants' answers as regards learning opportunities they consider most helpful. Top 5 items rated as most helpful by the majority of participants (rated as 4 or 5) include:

1. Support on engaging in EU/international projects (74%)
2. Conference attendance (73%)
3. Disciplinary related research support (72%)
4. Support on building collaborations and networks (67%)
5. Cross disciplinary research support (64%)

Self-identification as a successful learner revealed weak but significant correlations with 4 of the above supports including:

1. Conference attendance ($r=.22$, $p<.01$)
2. Cross-disciplinary research support ($r=.17$, $p<.01$)
3. Support on building collaboration and networks ($r=.15$, $p<.05$)
4. Support in engaging in international projects ($r=.16$, $p<.01$)

Table 114. Learning opportunities: Conference/event attendance

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all helpful	6	2.3	2.4	2.4
2	14	5.3	5.6	8.1
Valid 3	48	18.3	19.4	27.4
4	87	33.1	35.1	62.5
absolutely helpful	93	35.4	37.5	100.0
Total	248	94.3	100.0	
Missing System	15	5.7		
Total	263	100.0		

Table 115. Learning opportunities: Teaching and learning programmes

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all helpful	19	7.2	7.8	7.8
2	25	9.5	10.2	18.0
Valid 3	60	22.8	24.5	42.4
4	74	28.1	30.2	72.7
absolutely helpful	67	25.5	27.3	100.0
Total	245	93.2	100.0	
Missing System	18	6.8		
Total	263	100.0		

Table 116. Learning opportunities: Teaching and learning workshops

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all helpful	12	4.6	4.9	4.9
2	22	8.4	8.9	13.8
Valid 3	56	21.3	22.8	36.6
4	71	27.0	28.9	65.4
absolutely helpful	85	32.3	34.6	100.0
Total	246	93.5	100.0	
Missing System	17	6.5		
Total	263	100.0		

Table 117. Learning opportunities: Disciplinary related research support

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all helpful	9	3.4	3.7	3.7
2	9	3.4	3.7	7.3
Valid 3	50	19.0	20.4	27.8
4	85	32.3	34.7	62.4
absolutely helpful	92	35.0	37.6	100.0
Total	245	93.2	100.0	
Missing System	18	6.8		
Total	263	100.0		

Table 118. Learning opportunities: Cross disciplinary research support

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all helpful	10	3.8	4.1	4.1
2	13	4.9	5.3	9.4
Valid 3	63	24.0	25.8	35.2
4	71	27.0	29.1	64.3
absolutely helpful	87	33.1	35.7	100.0
Total	244	92.8	100.0	
Missing System	19	7.2		
Total	263	100.0		

Table 119. Learning opportunities: Support on building collaborations and networks

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	not at all helpful	6	2.3	2.4	2.4
	2	17	6.5	6.9	9.3
	3	57	21.7	23.2	32.5
	4	66	25.1	26.8	59.3
	absolutely helpful	100	38.0	40.7	100.0
	Total	246	93.5	100.0	
Missing	System	17	6.5		
Total		263	100.0		

Table 120. Learning opportunities: Support on engaging in EU/international projects

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	not at all helpful	7	2.7	2.8	2.8
	2	9	3.4	3.7	6.5
	3	49	18.6	19.9	26.4
	4	60	22.8	24.4	50.8
	absolutely helpful	121	46.0	49.2	100.0
	Total	246	93.5	100.0	
Missing	System	17	6.5		
Total		263	100.0		

Table 121. Learning opportunities: People management

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	not at all helpful	18	6.8	7.4	7.4
	2	30	11.4	12.3	19.8
	3	66	25.1	27.2	46.9
	4	73	27.8	30.0	77.0
	absolutely helpful	56	21.3	23.0	100.0
	Total	243	92.4	100.0	
Missing	System	20	7.6		
Total		263	100.0		

Table 122. Learning opportunities: Project management

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	not at all helpful	17	6.5	7.0	7.0
	2	23	8.7	9.5	16.5
	3	56	21.3	23.1	39.7
	4	75	28.5	31.0	70.7
	absolutely helpful	71	27.0	29.3	100.0
	Total	242	92.0	100.0	
Missing	System	21	8.0		
Total		263	100.0		

Table 123. Learning opportunities: Financial training

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	not at all helpful	32	12.2	13.2	13.2
	2	37	14.1	15.2	28.4
	3	73	27.8	30.0	58.4
	4	57	21.7	23.5	81.9
	absolutely helpful	44	16.7	18.1	100.0
	Total	243	92.4	100.0	
Missing	System	20	7.6		
Total		263	100.0		

Table 124. Learning opportunities: ICT (technology) training

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	not at all helpful	27	10.3	11.3	11.3
	2	19	7.2	7.9	19.2
	3	73	27.8	30.5	49.8
	4	59	22.4	24.7	74.5
	absolutely helpful	61	23.2	25.5	100.0
	Total	239	90.9	100.0	
Missing	System	24	9.1		
Total		263	100.0		

Table 125. Learning opportunities: Leadership training

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all helpful	26	9.9	10.8
	2	28	10.6	22.4
	3	70	26.6	51.5
	4	62	23.6	77.2
	absolutely helpful	55	20.9	100.0
	Total	241	91.6	100.0
Missing	System	22	8.4	
Total		263	100.0	

Table 126. Learning opportunities: Work life balance support/training

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all helpful	27	10.3	11.3
	2	27	10.3	22.5
	3	71	27.0	52.1
	4	46	17.5	71.3
	absolutely helpful	69	26.2	100.0
	Total	240	91.3	100.0
Missing	System	23	8.7	
Total		263	100.0	

Table 127. Learning opportunities: Time management

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all helpful	25	9.5	10.4
	2	33	12.5	24.2
	3	52	19.8	45.8
	4	62	23.6	71.7
	absolutely helpful	68	25.9	100.0
	Total	240	91.3	100.0
Missing	System	23	8.7	
Total		263	100.0	

Table 128. Learning opportunities: Career planning

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all helpful	38	14.4	15.6
	2	30	11.4	27.9
	3	62	23.6	53.3
	4	64	24.3	79.5
	absolutely helpful	50	19.0	100.0
	Total	244	92.8	100.0
Missing	System	19	7.2	
Total		263	100.0	

Table 129. Learning opportunities: Negotiating institutional systems and processes

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all helpful	33	12.5	13.6
	2	25	9.5	23.9
	3	80	30.4	56.8
	4	56	21.3	79.8
	absolutely helpful	49	18.6	100.0
	Total	243	92.4	100.0
Missing	System	20	7.6	
Total		263	100.0	

Table 129. Learning opportunities: Recruiting staff

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all helpful	33	12.5	13.6
	2	28	10.6	25.1
	3	78	29.7	57.2
	4	62	23.6	82.7
	absolutely helpful	42	16.0	100.0
	Total	243	92.4	100.0
Missing	System	20	7.6	
Total		263	100.0	

Table 130. Learning opportunities: Managing teams

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all helpful	19	7.2	7.9	7.9
2	28	10.6	11.6	19.4
3	71	27.0	29.3	48.8
Valid 4	73	27.8	30.2	78.9
absolutely helpful	51	19.4	21.1	100.0
Total	242	92.0	100.0	
Missing System	21	8.0		
Total	263	100.0		

2.13. Factors relevant to continuous professional development (CPD)

Tables 131-138 show participants answers on factors relevant to CPD. The top 3 factors rated as most important (4-5) by the majority of the sample include:

1. Personal interest in further professional learning (reported 4 or 5 by 86% of the sample)
2. Time (reported 4 or 5 by 77% of the sample)
3. Funding from my institution/university for CPD (reported 4 or 5 by 65% of the sample).

Self- identification as a successful learner significantly correlates with a. Personal interest in further professional development ($r=.25$, $p<.01$) b. Funding from my institution ($r=.17$, $p<.01$).

The factor identified as least relevant was ‘Institutional requirement for CPD for staff’ (only 46% of the sample rated it as 4-5).

Table 131. Importance for CPD: The availability of CPD opportunities in my institution/university

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all important	25	9.5	10.3	10.3
2	22	8.4	9.1	19.3
Valid 3	52	19.8	21.4	40.7
4	70	26.6	28.8	69.5
very important	74	28.1	30.5	100.0
Total	243	92.4	100.0	
Missing System	20	7.6		
Total	263	100.0		

Table 132. Importance for CPD: Funding from my institution/university for CPD

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all important	27	10.3	11.2	11.2
2	20	7.6	8.3	19.5
Valid 3	38	14.4	15.8	35.3
4	70	26.6	29.0	64.3
very important	86	32.7	35.7	100.0
Total	241	91.6	100.0	
Missing System	22	8.4		
Total	263	100.0		

Table 133. Importance for CPD: Time

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all important	5	1.9	2.1	2.1
2	10	3.8	4.2	6.3
Valid 3	39	14.8	16.3	22.6
4	60	22.8	25.1	47.7
very important	125	47.5	52.3	100.0
Total	239	90.9	100.0	
Missing System	24	9.1		
Total	263	100.0		

Table 134. Importance for CPD: Personal interest in further professional learning

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all important	3	1.1	1.3	1.3
2	5	1.9	2.1	3.3
Valid 3	25	9.5	10.5	13.8
4	62	23.6	25.9	39.7
very important	144	54.8	60.3	100.0
Total	239	90.9	100.0	
Missing System	24	9.1		
Total	263	100.0		

Table 135. Importance for CPD: Institutional recognition of further professional learning

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all important	16	6.1	6.7	6.7
2	18	6.8	7.5	14.2
Valid 3	59	22.4	24.6	38.8
4	93	35.4	38.8	77.5
very important	54	20.5	22.5	100.0
Total	240	91.3	100.0	
Missing System	23	8.7		
Total	263	100.0		

Table 136. Importance for CPD: A clear framework for continuing professional development

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all important	19	7.2	8.0	8.0
2	24	9.1	10.1	18.1
Valid 3	49	18.6	20.6	38.7
4	79	30.0	33.2	71.8
very important	67	25.5	28.2	100.0
Total	238	90.5	100.0	
Missing System	25	9.5		
Total	263	100.0		

Table 137. Importance for CPD: Institutional commitment to CPD for staff

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all important	25	9.5	10.5	10.5
2	33	12.5	13.8	24.3
Valid 3	47	17.9	19.7	43.9
4	71	27.0	29.7	73.6
very important	63	24.0	26.4	100.0
Total	239	90.9	100.0	
Missing System	24	9.1		
Total	263	100.0		

Table 138. Importance for CPD: Institutional requirement for CPD for staff

	Frequency	Percent	Valid Percent	Cumulative Percent
not at all important	28	10.6	11.7	11.7
2	34	12.9	14.2	25.9
Valid 3	66	25.1	27.6	53.6
4	66	25.1	27.6	81.2
very important	45	17.1	18.8	100.0
Total	239	90.9	100.0	
Missing System	24	9.1		
Total	263	100.0		

2.14. Personal traits

Tables 139-150 show participants' answers on personal traits. The top 5 traits rated as most influential by the majority of participants included: a. Curiosity (rated as 4-5 by 93% of the sample), b. Ability to Problem Solve (rated as 4-5 by 90%), c. Optimism/ Openness to new experiences/Freedom (rated all three as 4-5 by 89% of the sample) d. Determination (rated as 4-5 by 87%), e. Openness to collaboration (83%).

Correlations between self perceptions of being a successful writer and Personal traits revealed significant correlations with: Imagination ($r=.24, p<.01$); Curiosity ($r=.15, p<.05$), Kindness ($r=.18, p<.01$), willingness to take risks ($r=.14, p<.05$), Openness to collaboration ($r=.13, p<.05$), Willingness to travel for work ($r=.15, p<.05$)

Correlations between self perceptions of being a successful researcher and Personal traits revealed significant correlations with: Kindness ($r=.14, p<.05$), Willingness to take risks ($r=.14, p<.05$), Imagination ($r=.21, p<.01$), Openness to new experiences ($r=.13, p<.05$), Willingness to travel for work ($r=.15, p<.05$), Willingness to live overseas ($r=.13, p<.05$).

Correlations between self-perceptions of being a successful teacher and Personal traits revealed significant correlations with: Imagination ($r=.14, p<.05$), Ability to problem solve ($r=.18, p<.01$), Openness to collaboration ($r=.15, p<.01$), Willingness to travel for work ($r=.21, p<.01$),

Correlations between self perceptions of being a successful learner and Personal traits revealed significant correlations with: Sound values ($r=.32, p<.01$); Imagination ($r=.29, p<.01$); Strategic thinking ($r=.28, p<.01$); Kindness and compassion ($r=.26, p<.01$); Willingness to take risks ($r=.25, p<.01$); Openness to collaboration ($r=.23, p<.01$); Willingness to travel for work ($r=.23, p<.01$); Ability to problem solve ($r=.22, p<.01$); Openness to new experiences ($r=.20, p<.01$),

Determination ($r=.19, p<.05$), Willingness to live and work overseas ($r=.15, p<.05$), Freedom ($r=.14, p<.05$).

As might be noted personal factors common to successful teaching and learning include: Imagination, Ability to problem solve, Openness to collaboration Willingness to travel for work. Personal factors common to successful research and writing include: Imagination, Kindness, Willingness to travel for work. Finally, personal factors revealing correlations common to all four areas include: Imagination and Willingness to travel for work.

Table 139. Personal traits: Willingness to take risks

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	10	3.8	4.1	4.1
2	16	6.1	6.6	10.7
Valid 3	68	25.9	27.9	38.5
4	85	32.3	34.8	73.4
most influential	65	24.7	26.6	100.0
Total	244	92.8	100.0	
Missing System	19	7.2		
Total	263	100.0		

Table 140. Personal traits: Strategic thinking and planning

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	8	3.0	3.3	3.3
2	13	4.9	5.3	8.6
Valid 3	51	19.4	21.0	29.6
4	76	28.9	31.3	60.9
most influential	95	36.1	39.1	100.0
Total	243	92.4	100.0	
Missing System	20	7.6		
Total	263	100.0		

Table 141. Personal traits: Curiosity

	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	.8	.8	.8
3	16	6.1	6.6	7.4
Valid 4	61	23.2	25.2	32.6
most influential	163	62.0	67.4	100.0
Total	242	92.0	100.0	
Missing System	21	8.0		
Total	263	100.0		

Table 142. Personal traits: Optimism, positive attitude

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	2	.8	.8	.8
2	3	1.1	1.2	2.1
Valid 3	20	7.6	8.2	10.3
4	75	28.5	30.9	41.2
most influential	143	54.4	58.8	100.0
Total	243	92.4	100.0	
Missing System	20	7.6		
Total	263	100.0		

Table 143. Personal traits: Kindness and compassion

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	6	2.3	2.5	2.5
2	22	8.4	9.1	11.6
Valid 3	56	21.3	23.1	34.7
4	79	30.0	32.6	67.4
most influential	79	30.0	32.6	100.0
Total	242	92.0	100.0	
Missing System	21	8.0		
Total	263	100.0		

Table 144. Personal traits: Freedom

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	3	1.1	1.2	1.2
2	2	.8	.8	2.1
Valid 3	23	8.7	9.5	11.6
4	73	27.8	30.2	41.7
most influential	141	53.6	58.3	100.0
Total	242	92.0	100.0	
Missing System	21	8.0		
Total	263	100.0		

Table 145. Personal traits: Sound values – respect, equality, fairness, integrity

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	4	1.5	1.6	1.6
2	9	3.4	3.7	5.3
Valid 3	36	13.7	14.8	20.1
4	79	30.0	32.4	52.5
most influential	116	44.1	47.5	100.0
Total	244	92.8	100.0	
Missing System	19	7.2		
Total	263	100.0		

Table 146. Personal traits: Imagination

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	2	.8	.8	.8
2	11	4.2	4.5	5.3
Valid 3	48	18.3	19.8	25.1
4	84	31.9	34.6	59.7
most influential	98	37.3	40.3	100.0
Total	243	92.4	100.0	

Missing System	20	7.6	
Total	263	100.0	

Table 147. Personal traits: Determination/persistence

	Frequency	Percent	Valid Percent	Cumulative Percent
2	2	.8	.8	.8
3	30	11.4	12.3	13.2
Valid 4	73	27.8	30.0	43.2
most influential	138	52.5	56.8	100.0
Total	243	92.4	100.0	
Missing System	20	7.6		
Total	263	100.0		

Table 148. Personal traits: Openness to new experiences

	Frequency	Percent	Valid Percent	Cumulative Percent
2	4	1.5	1.6	1.6
3	24	9.1	9.9	11.5
Valid 4	68	25.9	28.0	39.5
most influential	147	55.9	60.5	100.0
Total	243	92.4	100.0	
Missing System	20	7.6		
Total	263	100.0		

Table 149. Personal traits: Ability to problem solve

	Frequency	Percent	Valid Percent	Cumulative Percent
2	3	1.1	1.2	1.2
3	22	8.4	9.1	10.3
Valid 4	86	32.7	35.4	45.7
most influential	132	50.2	54.3	100.0
Total	243	92.4	100.0	
Missing System	20	7.6		
Total	263	100.0		

Table 150. Personal traits: Openness to collaboration

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	1	.4	.4	.4
2	9	3.4	3.7	4.1
Valid 3	30	11.4	12.2	16.3
4	73	27.8	29.8	46.1
most influential	132	50.2	53.9	100.0
Total	245	93.2	100.0	
Missing System	18	6.8		
Total	263	100.0		

Table 151. Personal traits: Willingness to travel for work

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	14	5.3	5.8	5.8
2	20	7.6	8.3	14.0
Valid 3	40	15.2	16.5	30.6
4	71	27.0	29.3	59.9
most influential	97	36.9	40.1	100.0
Total	242	92.0	100.0	
Missing System	21	8.0		
Total	263	100.0		

Table 152. Personal traits: Willingness to live and work overseas

	Frequency	Percent	Valid Percent	Cumulative Percent
least influential	37	14.1	15.4	15.4
2	34	12.9	14.2	29.6
Valid 3	46	17.5	19.2	48.8
4	57	21.7	23.8	72.5
most influential	66	25.1	27.5	100.0
Total	240	91.3	100.0	
Missing System	23	8.7		
Total	263	100.0		

Table 150. Personal Traits Summary: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Curiosity	242	2.00	5.00	4.5909	.65216
Optimism, positive attitude	243	1.00	5.00	4.4568	.76681
Kindness and compassion	242	1.00	5.00	3.8388	1.05986
Freedom	242	1.00	5.00	4.4339	.79793
Sound values – respect, equality, fairness, integrity	244	1.00	5.00	4.2049	.93789
Willingness to take risks	244	1.00	5.00	3.7336	1.05348
Strategic thinking and planning	243	1.00	5.00	3.9753	1.05598
Imagination	243	1.00	5.00	4.0905	.92264
Determination/persistence	243	2.00	5.00	4.4280	.73712
Openness to new experiences	243	2.00	5.00	4.4733	.74016
Ability to problem solve	243	2.00	5.00	4.4280	.70854
Openness to collaboration	245	1.00	5.00	4.3306	.85942
Willingness to travel for work	242	1.00	5.00	3.8967	1.18849
Willingness to live and work overseas	240	1.00	5.00	3.3375	1.41075
Valid N (listwise)	229				

3. Summary and Conclusions

The above results could be summarized according to the four research questions:

- RQ1. What is common across the data - what are the common and most predominant characteristics and behaviours of stellar colleagues?
- RQ2: What is the support they find most useful?
- RQ3: What are the overlaps between supports?

- RQ4: What model of centralised support would be best for stellar colleagues.

Results related to RQ1:” What is common across the data - what are the common and most predominant characteristics and behaviors of stellar colleagues?” might be summarized as follows:

- Self-perceptions as a successful teacher, writer, learner and researcher are all related to each other, BUT the strongest correlations were revealed between **the roles of writer and researcher** (Pearson’s $r = .67$, $p < .01$), **teacher and learner** (Pearson’s $r = .46$, $p < .01$).
- Motivation to writing included: Passion for the discipline (74%), Desire to share your work (64%), The wish to advance my career (62%). Self-identification as a successful writer most strongly relates to “The wish to be recognized in the field ($r = .20$, $p < .01$). Strongest barriers to writing included: Other workload, (55%) and Lack of time (53%). Self-identification as a successful writer reveals the strongest negative relationship with ‘Lack of confidence about my writing’ ($r = -.36$, $p < .01$) and ‘Dislike of writing’ ($r = -.32$, $p < .01$).
- Motivation to research included: Intrinsic motivation (94%), Desire to learn more (86%), Desire to progress the field (84%). Self-identification as a successful researcher was most strongly correlated to “Desire to progress the field” (Pearson $r = .34$, $p < .01$).
- Sixty-one percent of the sample reported received no training before delivering first class and 67% received no institutional support for teaching during the first year.
- Regarding learning: “Personal interest in further professional development” was identified as the most relevant to success (**86%**)
- The most influential personal traits related to success included: Curiosity (93%), Ability to Problem Solve (90%), Optimism/Openness to new experiences/Freedom (89%). Only two traits correlated to self-perceptions of success **across all 4 Areas**: ‘Imagination’ and ‘Willingness to travel for work’

Results related to types of support and overlaps between supports (RQ2: What is the support they find most useful? RQ3: What are the overlaps between supports?) might be summarized as follows:

- Report on existing support revealed it is poorest for Writing (23%), 32% for Teaching & learning and 35% for professional development, and 38% for research. Institutions providing one type of support (e.g., Writing support) were more likely to provide other types of support too.
- The 3 most useful supports for writing were: Access to relevant literature (78%), Structured Feedback (68%), Dedicated long blocks/Mentoring/Editor corrections/services (60%).
- The 3 most useful supports for research were: Grant funding (66.5%); Presenting results at international events (65%); Opportunity to collaborate with others (58%);
- The 3 most relevant supports for teaching were: Feedback from students (83%), Student performance/learning (76%); Sharing pedagogic practice through informal professional conversations (67%)
- The 3 most relevant supports for learning were: Conference attendance (73%); Support in engaging in international projects (74%); Disciplinary related research support (72%)

- f. **‘Collaboration with others’** seems to be a common factor cutting across all four areas a. Writing: *Structured feedback/Editors*; b. Research: *Opportunity to collaborate with others*;
3. Teaching: *Sharing pedagogical practice through informal professional conversations*;
4. Learning: *Disciplinary related research support (72%)*

Regarding RQ4, ‘What model of centralized support would be best for stellar colleagues?’ results suggest that models of centralized support across the 4 areas might consider:

1. Dyads that relate more closely, such as teaching-learning or research-writing might be used as a basis to construct models of centralized support
2. Enhancement of collaboration opportunities (local and international) across all four areas teaching, learning, research and writing (professional development through collaboration)
3. Traveling support for research purposes, teaching/writing skills development
4. The stimulation of personal characteristics (Imagination), through specific CPD activities
5. Addressing barriers, such as ‘other workload’, also by means of institutional policy recommendations