

Policy Brief

Organisational features of Norwegian higher education institutions: perceptions on organisational change

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Abstract

In 2015 a large-scale re-structuring of the Norwegian higher education sector was launched, resulting in a number of merger processes leading to more comprehensive institutions than before. The merger processes are complex organisational processes which arguably have impact on key organisational features such as information flow, communication, engagement, collaboration, organisational culture, commitment, leadership and organisational change. Based on data from a 2021 survey among academic staff, this brief compares six of the institutions merging between 2016 and 2017 (INN, NORD, HVL, USN, UiT and NTNU) with a sample of 15 other higher education institutions in Norway. The tendency is that academic staff at the merged institutions in general are less positive with respect to organisational features of their institution than those in the group of other institutions. Both the type of institution and subject fields do play a role in staff reflections on organisational features as well.

Introduction

As part of the evaluation of the large-scale re-structuring of the Norwegian higher education sector, a survey was launched to capture the experiences of academic staff. A first policy brief addressed the activities (research, teaching, third mission) they were presently involved in as well as changes on six dimensions related to the reform goals; high quality education, robust academic communities, “proper” access to education, regional development and cooperation, international orientation/global competitiveness/world leading and the efficient use of resources (Huisman, Eide, Daenekindt & Frølich, 2022). Huisman, Eide, Daenekindt & Frølich (2022) concluded that “regarding the perceived change over the past five years, the overall message that can be gleaned from the data is that a very large group of respondents perceive either no change or do not know. This strongly suggests that the intended change through

the structural reform has not yet materialised”. Moreover, a somehow paradoxical finding seems to be that the merging process likely inhibited many of the institutions involved to realise the reform objectives. Furthermore, insofar change was noted, the brief concluded that this is not unambiguously related to the reform intentions of the government, bearing in mind that the reform was not the only change in the Norwegian sector. The reform is a successor of earlier reforms and obviously activities and perceptions of change are affected by other external factors as well.

This policy brief follows up on academic staff’s perceptions of the organisational features of their institutional contexts, including organisational information and communication, organisational engagement and collaboration, organisational culture and organisational change.

Context and background

As a result of the Structural Reform in Norwegian higher education launched in April 2015 in the white paper 'Concentration for Quality' (Kunnskapsdepartementet, 2014-2015), a large-scale organisational redesign of the higher education landscape is on-going. As a result of the reform, the number of higher education institutions is significantly reduced. The mergers represent a new dynamic as they encompass mergers between different types of institutions (universities and university colleges), often across large geographic distances, creating large multi-campus institutions. The merger processes represent both horizontal (similar institutions, e.g. multiple university colleges) and vertical (universities "take-over" over earlier university colleges) types (Harman & Harman, 2003). The redesign of the higher education landscape through mergers meant a gradual change from inter-institutional to intra-institutional variation.

Merger processes and institutional integration are complex processes. The Norwegian mergers take place in the context of general change processes in higher education. Higher education has undergone a fast pace of change over the last 50 years guided by a changing mix of organizational ideals (e.g., from a classic collegial chair-faculty model, via a collegial departmental model towards a managerial model). Recent studies have demonstrated that in practice: higher education institutions often combine characteristics from all these models, change processes are uneven and layered, and that old and new ideas continue to co-exist. Following this argument, organizational integration processes lead to increased hybridity in terms of activities, structures, processes and meanings. Hybridity can imply that segmented and differentiated organising remain despite reorganisation processes, or when logics remain unresolved, they can also lead to a dysfunctional or blocked version. Processes of integration can lead to either assimilation processes where one dominant organising logic "takes over", or an integration process where something new emerges. Thus, we expect that a number of factors will play a role for the internal organisational integration processes. This includes the enduring institutional characteristics of the organizations involved (e.g., organisation according to disciplines and professional fields, varied regional embeddedness, etc), but also factors concerning the merger itself, e.g., the number of institutions in the merger process; whether they can be seen as similar or dissimilar; or type of merger (horizontal or vertical). The institu-

tional integration processes are interpreted and experienced by academic staff; their views are therefore important input to understanding the current organisational change processes.

Data and method

The survey was distributed in February 2021 to 7,461 academic staff at Norwegian universities and university colleges. We received 3,753 valid responses, implying a response rate of 50,3 % (Eide, Solberg, Huisman, & Frølich, 2021). The survey was sent to academic staff at universities and colleges, regardless whether their institution was part of the merger process. This enabled us to make comparisons between the six case institutions (INN, NORD, HVL, USN, UiT and NTNU) and the other Norwegian higher education institutions. We also made comparisons by eight subfields (business and administration; teacher education and pedagogy; natural science; social science; humanities and arts; medicine; health and care; and engineering and technology), denoting the professional/academic background of the respondents, and by type of higher education institution. For that latter dimension, we distinguish between subgroups of types of institutions such as old universities (UiO, UiB, UiT and NTNU), new universities (UiS, UiA, Nord, Oslomet and USN), specialized university colleges (Nmbu, Nhh, Aho, Nih, Nmh, KhiO), university colleges (HiV, HiM, HiOf, Samiskh) and aspiring university colleges (HVL, Hinn). We refer to Eide, Solberg, Huisman, & Frølich (2021) for more details on the numbers of responses per institution.

Organisational information and communication

The results from two-sampled t-tests show that there are significant² differences between the case institutions and the rest of the institutions on all of the items concerning organisational information and collaboration except one – "In my unit I take the opportunity to influence decision-making". The rest of the institutions in the sector have a higher mean value than the case institutions and seem to be more positive towards the information flow and communication in their organisations.

Through Anova analyses we find significant differences between the institutional types on all of the items above. Post-hoc tests show that specialized uni-

Table 1: To what extent do you disagree or agree with the following statements?
 Percentage of answers per category, mean answer score and standard deviation.

Research activities	Largely disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Largely agree	Mean	Std. Dev.
My unit communicates with other units at the institution	6	11	15	42	27	3.74	1.14
I receive information about important decisions that concern my unit	6	12	11	38	34	3.82	1.19
I am informed about initiatives at other units of the institution	15	23	21	33	9	2.97	1.23
The leadership of my unit keeps me updated on issues of relevance to my work	9	14	14	34	30	3.63	1.27
In my unit there is good communication between the leadership and academic staff	10	15	16	29	30	3.54	1.33
In my unit I have opportunities for influencing decision-making	14	16	17	35	19	3.29	1.31
In my unit I take the opportunity to influence decision-making	8	9	23	38	22	3.58	1.16
Overall, I am satisfied with the information flows in my unit	11	19	17	31	22	3.35	1.31
Overall, I am satisfied with communication in my unit	12	19	16	31	23	3.35	1.33

versity colleges stand out in this regard. They consistently score highest and differ from at least one other type of institution on each of the items. We find differences between subfields on four of the items – “My unit communicates with other units at the institution”, “In my unit there is good communication between the leadership and academic staff”, “In my unit I

have opportunities for influencing decision-making” and “In my unit I take the opportunity to influence decision-making”. Most differences can be found on this last item. The field health & care stands out here, since it differs from all other fields except social science, and humanities & art.

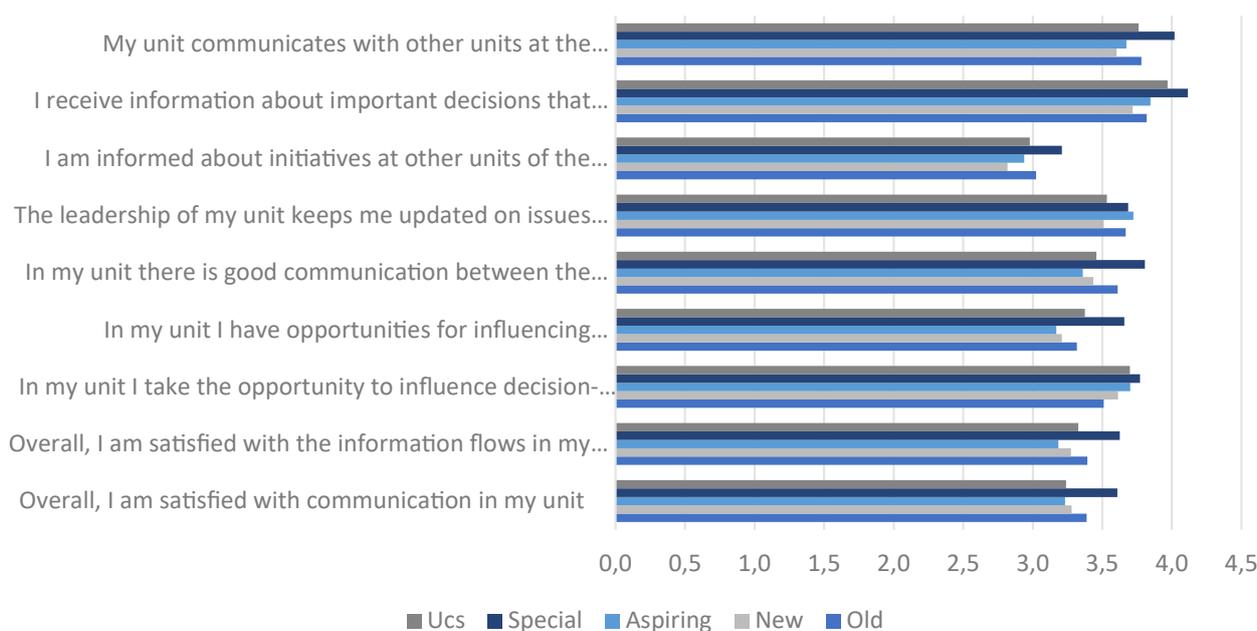


Figure 1 Mean values by institutional type. Range 1 (largely disagree) to 5 (largely agree)

Organisational engagement and collaboration

Two-sampled t-tests show that there are significant differences between the case institutions and the rest of the institutions in the sector. The latter have a higher mean value on three items – “Our unit collaborates with other units at the institution”, “Decisions that concern our unit are taken at the lowest possible level” and “Our unit has considerable autonomy in how to implement institutional strategies”. The case institutions have a higher mean value on three items – “I am resigned to doing only the minimum”, “I feel the leadership is physically located too far away from me” and “I feel my colleagues are physically located too far away from me”. Thus, the case institutions show more negative sentiments towards the engagement

in the organization and a stronger feeling of distance between themselves and the leadership of the organization, as well as between themselves and their colleagues in comparison to the rest of the institutions.

Through Anova analyses we find significant differences between the different institutional types on all the items except two – “I am engaged in maintaining my unit’s core values”, and “I am resigned to doing only the minimum”. Furthermore, we find significant differences between the subfields on six of the eight items. There are no significant differences on the items “I am resigned to doing only the minimum”, and “decisions that concern our unit are taken at the lowest possible level”.

Table 2: To what extent do you disagree or agree with the following statements?
Percentage of answers per category, mean answer score and standard deviation.

Research activities	Largely disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Largely agree	Mean	Std. Dev.
Our unit collaborates with other units at the institution	6	11	19	42	22	3.64	1.12
I am engaged in maintaining my unit’s core values	2	5	24	35	34	3.94	0.98
I actively invest in developing my institution further	5	8	20	38	29	3.78	1.10
I am resigned to doing only the minimum	54	19	14	9	4	1.89	1.16
Decisions that concern our unit are taken at the lowest possible level	20	25	35	15	5	2.59	1.11
Our unit has considerable autonomy in how to implement institutional strategies	11	18	34	28	10	3.08	1.13
I feel the leadership is physically located too far away from me	34	19	21	14	12	2.50	1.39
I feel my colleagues are physically located too far away from me	41	20	19	13	7	2.24	1.29

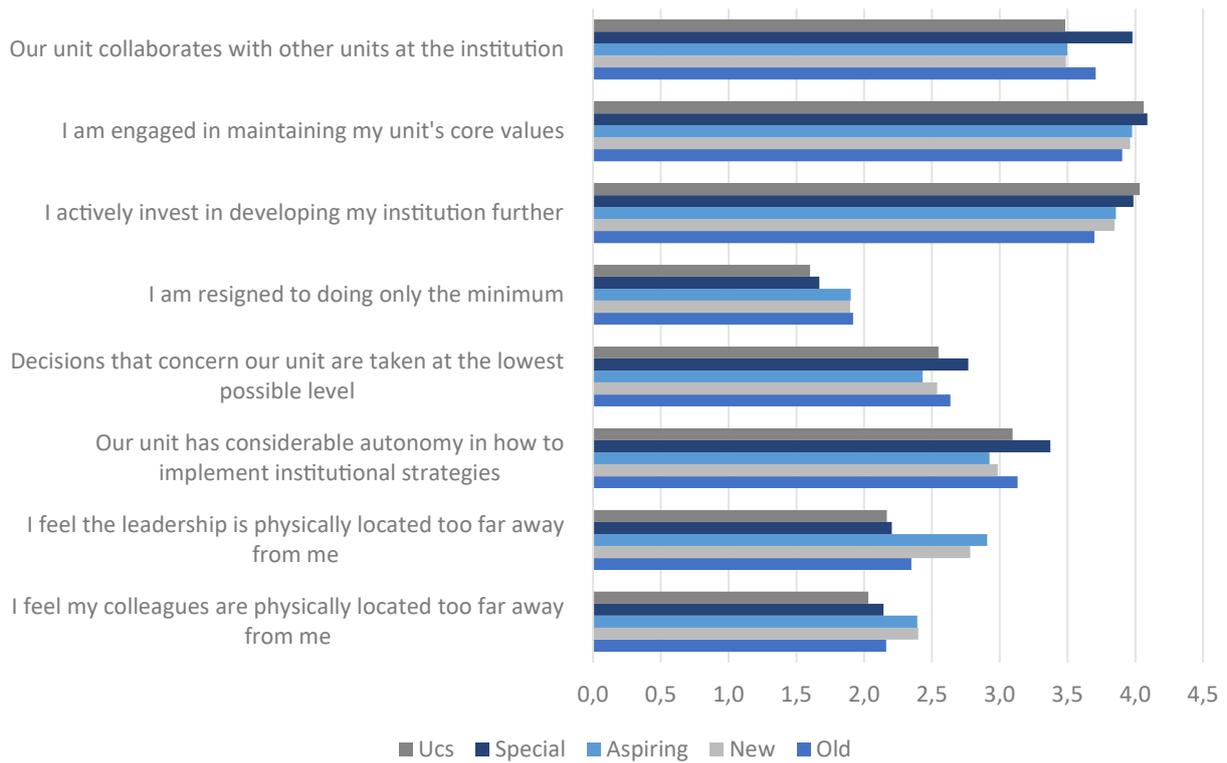


Figure 2 Mean values by institutional type. Range 1 (largely disagree) to 5 (largely agree)

Organisational culture

Two-sampled t-tests show significant differences between the case institutions and the rest of the sector in how much they agree with most of the statements about organisational culture. The rest of the institutions have a higher mean value on the following three items - "I feel my unit empowers its employees", "I feel my unit is trustworthy" and "I feel my unit is compassionate". The case institutions have a higher mean value on the following five items - "I feel my unit is impersonal", "I feel my unit is not responsive", "I feel my unit is unstable", "I feel my unit is unsuccessful" and "I feel my unit is not responsible". Thus, we see that the case-institutions agree to a larger extent with the negative statements related to organizational culture, while the rest of the sector agrees to a larger extent to positive statements about organizational culture.

Anova analyses show significant differences between the institutional types on all the items except these three- "I feel my unit is conservative", "I feel my unit is proactive" and "I feel my unit is collegial". We also find significant differences between the subfields on three items "I feel my unit is impersonal", "I feel my unit is unstable" and "I feel my unit is not responsible". Post-hoc tests show that answers are consistently most positive for specialized university colleges. They differ from most other institution on all statements except "I feel my unit empowers its employees". Furthermore, we find significances between subfields on three of the items - "I feel my unit is impersonal", "I feel my unit is unstable", and "I feel my unit is not responsible".

Table 3: To what extent do you disagree or agree with the following statements?
 Percentage of answers per category, mean answer score and standard deviation.

Research activities	Largely disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Largely agree	Mean	Std. Dev.
I feel my unit is conservative	15	23	30	24	8	2.89	1.18
I feel my unit empowers its employees	8	14	23	36	19	3.44	1.89
I feel my unit is impersonal	26	30	22	16	6	2.45	1.21
I feel my unit is not responsive	24	28	21	19	8	2.61	1.2e6
I feel my unit is unstable	33	26	22	13	6	2.33	1.23
I feel my unit is trustworthy	6	10	20	37	28	3.71	1.14
I feel my unit is unsuccessful	51	19	18	8	3	1.92	1.13
I feel my unit is proactive	5	14	33	35	12	3.34	1.04
I feel my unit is collegial	5	10	21	38	26	3.71	1.10
I feel my unit is not responsible	58	19	16	5	2	1.75	1.04
I feel my unit is compassionate	8	12	27	34	18	3.43	1.16

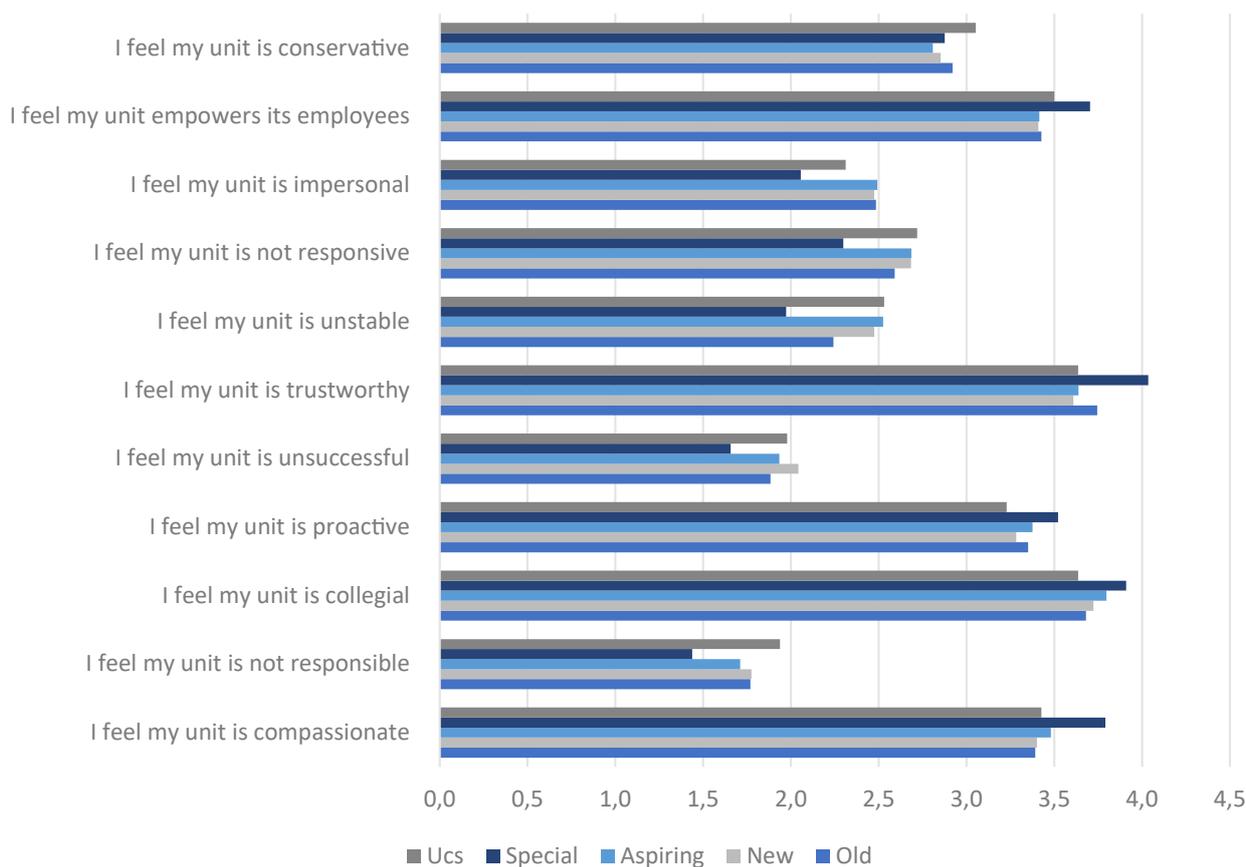


Figure 3 Mean values by institutional type. Range 1 (largely disagree) to 5 (largely agree)

Organisational commitment

Regarding organisational commitment, the two-sampled t-tests show some significant differences between the case institutions and the rest of the institutions in the sector. The rest of the sector has a higher mean value on these two items – “Ideally, I will spend the rest of my career within this unit” and “It would be very hard for me to leave my unit right now, even if I wanted to”. On the contrary, the case institutions have a higher mean value on the item “It would not be too costly for me to leave my unit now”. Thus, the rest of the sector implies a stronger sense of commitment than the case institutions.

Anova analyses show significant differences between the institution types on three of the items –

“Ideally, I will spend the rest of my career within this unit”, “I do not feel like “part of the family” at my unit” and “If I got another offer for a better job elsewhere, I would not feel it was right to leave my unit”. Post-hoc tests show that the significant Anova results originate from just a few differences in answers between types of institutions. We also find significant differences between the subfields on two items; “Ideally, I will spend the rest of my career within this unit” and “I do not believe that a person must always be loyal to his or her unit”. Post-hoc tests show that there are many differences between the subfields, but there is not one subfield that stands out.

Table 4: To what extent do you disagree or agree with the following statements? Percentage of answers per category, mean answer score and standard deviation.

Research activities	Largely disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Largely agree	Mean	Std. Dev.
Ideally, I will spend the rest of my career within this unit	12	12	17	25	34	3.58	1.37
I do not feel like “part of the family” at my unit	35	24	14	18	10	2.46	1.38
It would not be too costly for me to leave my unit now	27	23	20	19	12	2.65	1.35
It would be very hard for me to leave my unit right now, even if I wanted to	20	22	23	23	14	2.89	1.33
I do not believe that a person must always be loyal to his or her unit	13	20	27	27	13	3.08	1.22
If I got another offer for a better job elsewhere, I would not feel it was right to leave my unit	29	23	24	16	8	2.51	1.28

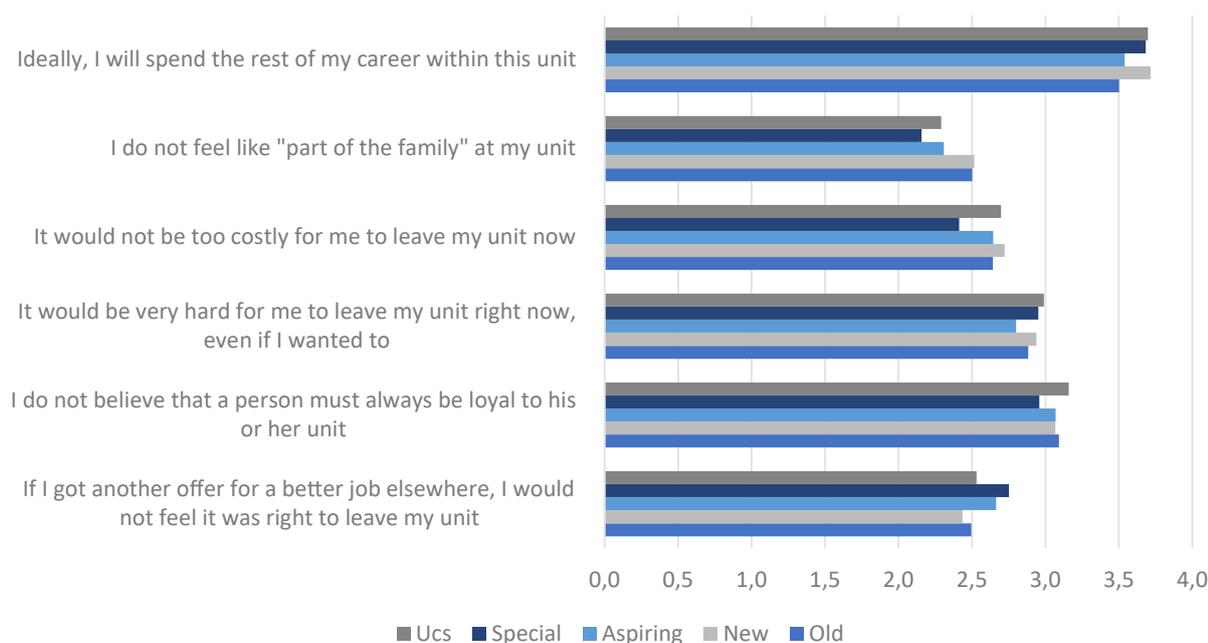


Figure 4 Mean values by institutional type. Range 1 (largely disagree) to 5 (largely agree)

Leadership

The two-sampled t-tests show that there are significant differences between the case institutions and the rest of the sector on six items, in which the rest of the sector have a higher mean value: “My leaders provide me assistance in exchange for my effort”, “My leaders concentrate their full attention on dealing with mistakes, complaints, and failures”, “My leaders go beyond self-interest for the good of the group”, “My leaders talk enthusiastically about what tasks need to be accomplished”, “My leaders re-examine critical assumptions to question whether these are appropriate” and “My leaders help me look at problems from many different angles”.

Through Anova analyses, we find significant differences between institutional types on all of the items except four – “My leaders provide me assistance in exchange for my effort”, “My leaders direct my attention toward failures to meet standards”, “My lea-

ders fail to intervene until problems become serious”, and “My leaders believe strongly that “If a thing is not broken, do not fix it””. Post-hoc tests show that on three of these items specialized university colleges differ significantly from at least one other type of institution. Furthermore, we find significant differences between the subfields on seven out of ten items. We do not find differences on “My leaders provide me assistance in exchange for my effort”, “My leaders fail to intervene until problems become serious” and “My leaders believe strongly that “If a thing is not broken, do not fix it””. Post-hoc tests show that teacher education & pedagogy differs from at least one other subfield on all but one of the items. Moreover, medicine differs from most of the other subfields on the statements regarding looking at problems from a different angle and teaching & coaching.

Table 5: How often do you experience the following behaviours of your leaders?
Percentage of answers per category, mean answer score and standard deviation.

Research activities	Not at all	Once in a while	Sometimes	Fairly often	Frequently - if not always	Mean	Std. Dev.
My leaders provide me assistance in exchange for my effort	12	19	26	29	15	3.16	1.24
My leaders concentrate their full attention on dealing with mistakes, complaints, and failures	12	23	29	26	10	2.97	1.17
My leaders direct my attention toward failures to meet standards	25	28	31	12	5	2.43	1.12
My leaders fail to intervene until problems become serious	25	27	27	15	7	2.54	1.21
My leaders believe strongly that “If a thing is not broken, do not fix it”	28	21	31	14	6	2.50	1.20
My leaders go beyond self-interest for the good of the group	10	14	26	34	16	3.33	1.19
My leaders talk enthusiastically about what tasks need to be accomplished	11	18	26	30	16	3.22	1.22
My leaders re-examine critical assumptions to question whether these are appropriate	12	20	35	24	10	3.02	1.14
My leaders help me look at problems from many different angles	19	24	28	20	9	2.75	1.22
My leaders spend time teaching and coaching me	36	26	20	11	6	2.25	1.22

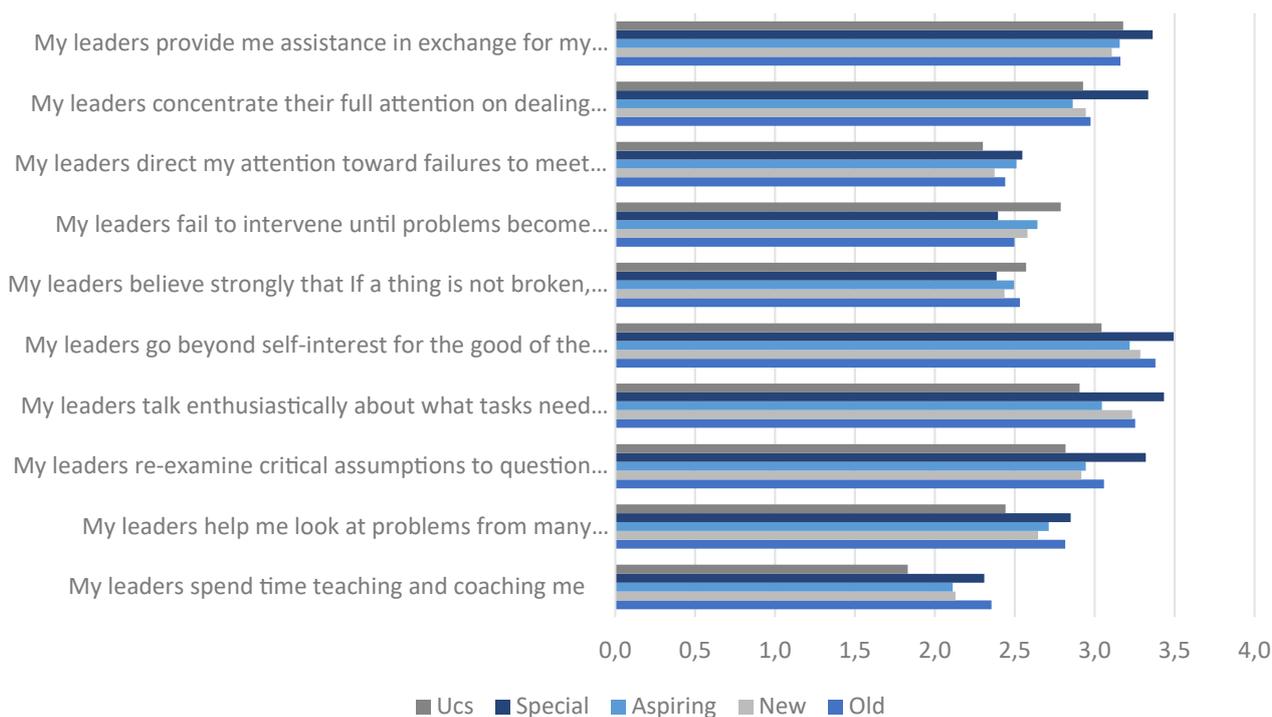


Figure 5 Mean values by institution types. Range 1 (largely disagree) to 5 (largely agree)

Organisational change

We first present results on the item that measured overall change in the respondents organizational contexts and then follow up with more fine-grained analyses.

An important observation is that a considerable share of the respondents neither agree nor disagree with the statement (see also table 9 for more specific items on organisational change). The two-sampled t-test shows that the academic staff working at the case institutions have a higher mean value on this

item. Thus, they report more change in the organisational context in which they work than the rest of the sector. The Anova analyses show that there is also a significant difference between the institutional types and between the subfields on this item. A post-hoc test shows that there are no significant differences between specific types of institutions, despite the overall significant Anova test. A second post-hoc test shows that there are multiple differences across the subfields, but none of the subfields really stands out.

Table 6: To what extent do you disagree or agree with the following statement? Percentage of answers per category, mean answer score and standard deviation.

Research activities	Largely disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Largely agree	Mean	Std. Dev.
Compared to five years ago, the organizational context in which I work is quite different	9	9	28	28	26	3.5	1.2

Table 7: How do you evaluate the development of your institution over the last five years? Percentage of answers per category.

	Became much worse	Became somewhat worse	Did not change	Became somewhat better	Became much better	I don't know
Our sense of shared identity	12	23	28	20	6	12
My commitment to the institution	7	18	43	16	6	9
My connection to the values and norms of my institution	5	12	51	15	6	11

As a follow-up to our earlier observation, also here the share of respondents that did not witness change or do not know is large, for two of the items the share ranges from 51.9 to 61.6%.

Two-sampled t-tests show that there are significant differences between the case institutions and

the other institutions. The other institutions have a higher mean value, meaning that they report a more positive development in their sense of shared identity, their commitment to the institution in which they work, and their connection to the values and norms of the institution, compared to the case institutions. The Anova analyses show significant differences between the institution types and between the subfields on all three of the items above. Post-hoc tests show that there are many significant differences. For example, old universities and specialized university colleges each differ from at least on other type of institution on all three items. Moreover, teacher education & pedagogy differs on all items from at least engineering & technology and medicine.

Table 8: How do you evaluate the development of your institution over the last five years? Means and standard deviations after exclusion of "I don't know" answers.

	Mean	Std. Dev.
Our sense of shared identity	2.84	1.12
My commitment to the institution	2.96	0.99
My connection to the values and norms of my institution	3.07	0.90

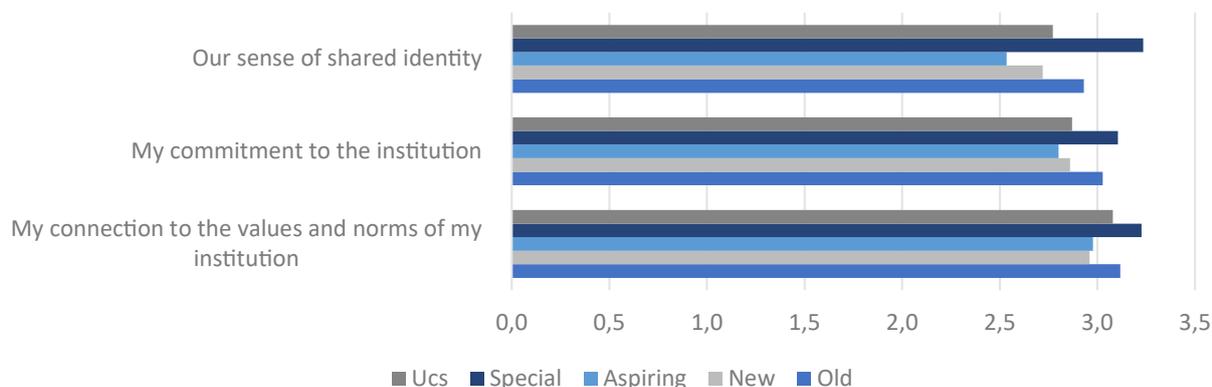


Figure 6 Mean values by institution types. Range 1 (became much worse) to 5 (became much better)

Table 9: How do you evaluate the development of your unit over the last five years?
Percentage of answers per category.

	Became much worse	Became somewhat worse	Did not change	Became somewhat better	Became much better	I don't know
Our ability to standardise processes	3	8	26	30	7	25
The division of roles and responsibilities	7	17	26	26	7	18
The way we document processes	5	10	30	24	6	24
Our autonomy in decision-making	11	19	33	13	3	22
Our autonomy in policy-making	10	16	33	13	4	24
Our unit's accountability for its performance	4	8	37	18	4	28
Our unit's ability to make decisions at the lowest possible level	11	18	34	12	4	22
The flexibility in our activities	8	18	33	18	6	19
Our collaboration with other departments in our faculty	3	9	38	23	6	21
Our collaboration with other faculties at the institution	4	8	42	19	5	24
The visibility of the leadership	10	15	31	20	9	15
The quality of information about things that matter to me	7	15	38	20	7	14
The internal coherence	8	14	37	14	6	22
Our sense of a shared identity	12	18	31	18	7	15
My commitment to the unit	7	14	46	15	7	12
My sense of connecting to the values and norms of my unit	5	10	51	14	7	14

Two-sampled t-tests show that there are significant differences between the case institutions and the rest of the sector regarding their responses to the questions about organisational change. The other institutions have a higher mean value on all the items except the first one, “Our ability to standardise processes”. Thus, the academic staff working at the other institutions in the sector report somewhat more positive change in their organisations than the academic staff working at our case institutions.

Through Anova analyses, we also find significant differences among types of institutions on all items except the first one – “Our ability to standardise

processes”. Post-hoc tests show that old universities and specialized university colleges each differ from new and aspiring universities on almost all statements. Moreover, we find significant differences between the different subfields on all items except these three; “Our ability to standardise processes”, “The division of roles and responsibilities” and “Our unit's accountability for its performance”. Post-hoc tests show that the subfield medicine differs from at least one other subfield on most of the statements. Often humanities & art, teacher education & pedagogy and social science are among the subfields that differ from medicine.

Table 10: How do you evaluate the development of your unit over the last five years? Means and standard deviations after exclusion of “I don’t know” answers.

	Mean	Std. Dev.
Our ability to standardise processes	3.42	0.94
The division of roles and responsibilities	3.11	1.08
The way we document processes	3.20	1.00
Our autonomy in decision-making	2.75	1.03
Our autonomy in policy-making	2.79	1.04
Our unit’s accountability for its performance	3.14	0.90
Our unit’s ability to make decisions at the lowest possible level	2.74	1.02
The flexibility in our activities	2.93	1.05
Our collaboration with other departments in our faculty	3.23	0.90
Our collaboration with other faculties at the institution	3.16	0.87
The visibility of the leadership	3.05	1.14
The quality of information about things that matter to me	3.05	1.02
The internal coherence	2.95	1.02
Our sense of a shared identity	2.88	1.13
My commitment to the unit	3.01	0.97
My sense of connecting to the values and norms of my unit	3.09	0.89

Organisational features of merged and non-merged institutions

This policy brief has analysed the response to a large-scale survey administered to academic staff with the aim of exploring organisational features of higher education institutions in Norway and to what extent these have been changing over the last five years. For this policy brief we decided to stick primarily to presenting the ‘facts’ as in: the opinions and experiences of the staff that filled out the survey. This means that the findings do not allow for far-fetched conclusions regarding the explanation of the findings on and differences across the Norwegian higher education sector. It should also be borne in mind that we, next to presenting the results by item and furthermore ‘only’ looked at broad differences between merged versus non-merged institutions, between disciplines and between types of higher education institutions. In the remainder of the project, we will carry out more

fine-grained and sophisticated analyses. With these caveats in mind, we think the following can be concluded.

First, for all the organisational themes (information flow and communication, organisational engagement and collaboration, organisational culture, organisational commitment and leadership), we find significant differences between the merged and non-merged institutions. Generally, the respondents of the non-merged institutions see more positives, compared to the merged institutions. It is too early to offer firm conclusions, but an interim reflection would be that the organisational features of the merged institutions are not (yet) in sync with what we would term appropriate organisational characteristics.

Second, a(nother) qualification is needed for we also see – next to differences between merged and non-merged institutions – many differences by institutional type and by subfield, suggesting that not only being merged or not affects the respondents’ view, but also the specific organisational and disciplinary/field context.

Third, regarding the level of change over the past five years or so, both at the organisational and unit level, and important finding is that many respondents answer that they “do not know” or do not experience change. That said, and echoing the first conclusion, non-merged institutions report a more positive development in their sense of shared identity, their commitment to the institution in which they work and their connection to the values and norms of the institution, compared to the merged institutions. Additional analyses also show significant differences between the institutional types and between the subfields.

Mergers and institutional integration are indeed complex processes, evidently influencing the organisational features of the merged institutions. While the intended change through the structural reform has not yet materialised in academic practices and goal attainment, organisational characteristics are to some extent changing. However, we should be careful in unambiguously relate the changes to the merger processes and the reform intentions of the government, bearing in mind that the reform was not the only change in the Norwegian sector. The reform is a successor of earlier reforms and obviously activities and perceptions of change are affected by other external factors as well.

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Notes

1. This brief is written as part of the Re-Structure project which is the research-based evaluation of the Structural reform conducted by researchers amongst others from CHEGG at Ghent University and NIFU.
2. Throughout the report, significance is tested using an alpha-level of 5%.

NIFU

Nordisk institutt for studier av
innovasjon, forskning og utdanning

Nordic Institute for Studies in
Innovation, Research and Education

NIFU is an independent social science research institute, offering decision-oriented research to the public and private sectors.

The research covers the entire area of education and research policy – from primary and secondary education, via higher education to research, innovation and skills in the workplace.

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