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The importance of geography and culture in mergers: A Norwegian institutional case study

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Abstract. Internationally the main intention of merging higher education institutions has often been that the establishment of larger units should result in academic and administrative economies of scale. This was also the case in the Norwegian State College Reform. This article focuses on how geographical distance, as well as cultural differences between subunits at Telemark College, influence the degree of attainment of academic and administrative goals. By using network theory and a cultural approach, we have studied the merger processes as well as the outcomes of the amalgamation. In the conclusion, lessons to be learned from this case study are highlighted.

Keywords: amalgamation, co-operation, cultural differences, institutional change, integration, merger, network institution, network theory

Introduction

The main goals with the Norwegian State College reform in 1994 were to strengthen academic integration and co-operation as well as administrative functions by the creation of larger units. In this article we focus on the college that faced the greatest challenges regarding these intentions after the amalgamation. Telemark College is a prototype of a multicampus or network institution, and has five campuses with large distances between each campus. In addition two departments are also divided between two different campuses. Furthermore, there were great cultural differences between the previous colleges in the county of Telemark. Both geographical and cultural aspects have proved to be major factors in both the merger process and in the outcomes of the merger. We have therefore based our analysis on network theory and a cultural approach. These perspectives will be used to study the merger process as well as administrative, economic and academic effects. Finally we try to elaborate on lessons learned from this case study.

This article is based on data from three main sources. First, data from the evaluation of the Norwegian college reform (see Kyvik 1999; Skodvin

1999b). Secondly, data from two rounds of interviews with academic leaders, administrators and academic personnel at Telemark College in January/ February 1996 and in February 1997, respectively two and three years after the merging process. Thirdly, we use data from a comparative study of the merger processes in the counties of Telemark and Agder (Dahl 1999). The purpose of the interviews was to clarify what strategic and academic direction academic leaders wanted to follow at Telemark College. Furthermore they focused on the effects of the merging process at the departmental and management level, and how academic integration and co-operation between the different geographically located campuses was working three years after the reorganisation. The interviews are based on semi-structured and focused interview guides (Merton et al. 1990). The interview guides were pre-tested for increased validity. The execution of two rounds of interviews should also improve the chances for high reliability (Kirk and Miller 1986). In addition we use some of the perspectives of a previous article on Telemark College (Skodvin and Stensaker 1998).

Telemark College has today more than 4,000 full-time students and over 400 faculty and staff. The college offers a broad range of studies from onesemester courses, two- and three-semester degrees in academic disciplines, and three- and four-year professional degrees. In addition, it offers five-and six-year Master's Degrees and Doctorate programmes, mostly in cooperation with universities in Norway and abroad.

Telemark College consists of four previously independent colleges; a college of engineering, a college of health education, a college of teacher training and a regional college. Both during and after the process, the college faced at least three large challenges. First, the cultural differences between the previous colleges were large. Units at the previous regional college with its "university ideals", teacher training and health educations with their own professional ideals, and engineering with close ties to local industry all had different traditions, and before the merger they had very little contact with each other. Second, there are relatively large distances between the campuses from between twenty and one hundred and eighty kilometres. This makes it difficult to develop a well functioning social integration both between employees and between students, a problem, which is particularly noticeable in the two departments that are split over two different campuses. A third factor is the organisational structure of the new multi-campus institution. The new network structure at Telemark College is not especially suitable for large academic integration as the five new departments located at Telemark's five campuses reflect the previously independent colleges.

Theoretical perspectives

The challenges mentioned above can be related to some theoretical assumptions on integration across both large geographical distances and cultural differences.

One logical hypothesis is that a network college is more expensive to run than a physically integrated institution. Another is that it is more difficult to achieve collaboration and integration across course programmes at network colleges than at single-campus colleges. However, it might be difficult to sort out which problems are due to geography, and which problems are due to cultural differences between members of staff with backgrounds from various former colleges and with different professional identities. A first step in this analysis is to establish a theoretical framework for the empirical study.

Network theory

In order to analyse the integration process at multi-campus colleges, the use of network theory might be a fruitful approach. Within this perspective a network consists of nodes that are linked together by different ties (Lösch 1954; Christaller 1966; Törnquist 1990). Three types of networks may be distinguished from each other; infrastructural, organisational and social. Infrastructural networks are physical and constitute the geographical space. It is used in connection with different forms of transportation of materials, people, and messages. The last reflects more technological networks like computer-based networks and related systems (Dicken and Lloyd 1990). Organisational networks link individuals, groups and workplaces together in production systems, enterprises and other organisations (Tichy 1981). In this connection organisational networks relate to the formal structure at Telemark College. Social networks transmit ideas, impulses, and influence within different parts of society. This type of network is usually made up of individuals who know each other quite well and who repeatedly have personal contact (Pfeffer 1982, pp. 273-278; Burt 1980). In other words social networks might be seen as the informal connections between faculty members.

However, the success and degree of integration within a multicampus institution – is not only dependent on the establishment of the infrastructural, social- and organisational networks. How these networks function is even more important and dependent on the strength of the different network links or ties. One can differentiate between *weak and strong ties* or links (Granovetter 1973; Krackhardt 1992). The strength of the ties depends on the relations between the different units. The perfect network is where there is mutual interdependence between the different nodes in the network. However,

Clark (1983) argues that compared to business firms organised around the production and distribution of a set of products – academic institutions do not have strongly interdependent parts. They are *loose-coupled* organisations in which different units can put out products – new knowledge, graduates etc. in relatively self-contained ways; in other words there is a small degree of mutual interdependence between the different horizontal units. Related to this is also an another important term, the *structural hole* concept, which was first used in Burt's (1992) description of social networks in connection with economic transactions. This is defined as missing connections between the actors in a network. In a well-functioning network, the structural hole(s) have to be "filled" if the network is to function well. In this article we will argue that such *structural holes* can be a result of both weak organisational and academic ties, weak infrastructural links, lack of social connections between the different actors in the organisation, as well as cultural differences.

A cultural approach

In addition to network theory, a cultural approach can be useful in an analysis of merger between different higher education institutions. A main assumption within institutional theory is that studies of change in formal structure through merging would not be sufficient to understand behavioural patterns. Change is not mainly the result of extensive reforms, but the product of a continuing process in which norms and values that have developed over time are institutionalised and represent stabilising and conservative elements in organisations. This unique set of norms and values represents the organisation's history and tradition, which members strive to preserve (Selznick 1957; Krasner 1988; Brunsson and Olsen 1990). In this perspective the success of the Telemark college merger will to a large extent be dependent on the degree of integration between established traditions and cultural identities of the staff.

Norms and values illustrate that there are specific organisational *cultures* – either common for the whole organisation or, more likely, several subcultures across different parts of the organisation. The members identify with the organisation or the sub-unit, and the assumption is that organisational behaviour is affected by cultural rules that are embedded in the thoughts and actions of individual members (March and Olsen 1989; Brunsson and Olsen 1990). In our case, these cultures can be described as the basic professional values and beliefs of academics. The patterns of co-operation among academic staff members will reflect the different cultures which individuals bring into the new institution.

Thus, in a cultural approach, Telemark College must be considered as consisting of a wide range of cultures related to different academic disciplines and vocational educations, different traditions in teaching and research, etc. These cultures separate and unite; they unite staff who share a common academic culture and identity, and separate them from others whose identity and culture are recognised as being distinct. As a consequence, the merger implies that different structures of norms and values meet within the framework of a new organisation. This may result in the intended academic and administrative effects, but also in tensions related to cultural differences inhibiting collaboration. In sum, for the objectives to be reached, both crossdisciplinary co-operation and the creation of a common educational culture have to develop in spite of and across cultural differences. In addition, higher educational institutions are organisations in which the academic staff traditionally have a large degree of autonomy, and where identity and loyalty are connected to the discipline more than to the institution (Baldrigde and Deal 1983; Clark 1983). The assumption is that academic identity and culture more than organisational structures influence organisational behaviour. Therefore, structural integration between staff belonging to diverse educations and disciplines will not necessarily result in voluntary co-operation.

Based on the two above-mentioned theories/approaches we will analyse how geographical and cultural differences affect the merger process and effects, with special emphasis on the problems and challenges facing a network college.

The merger process

The character of the merger processes and of the institutions involved are in general vitally important factors for the outcome of a reorganisation process (Mulvey 1993). The merging of institutions means that the original organisations cease to exist and together form a new organisational entity. In such cases we may distinguish between *voluntary* and *forced* amalgamations. A voluntary merger is when two or more institutions initiate amalgamations themselves, rather than the impetus coming from the outside, whereas a *forced* amalgamation takes place where a merger is forced on institutions by some outside body (Harman and Meek 1988).

The merger at Telemark College was a part of the Norwegian State College reform, and is therefore a typical forced merger process initiated by the state in order to fulfil central national goals. As a consequence, the institutions and staff involved did not support the idea enthusiastically, and they tried to avoid a full merger in the county of Telemark. One of the main reasons for this resistance can be found in the character of the previous colleges as well as in the geographical structure of the county. Although the central authorities underlined the possible economies of scale and academic and administrative benefits of merging into a larger unit, the local actors questioned such positive effects. First, the local actors argued that the geographical distances between the different colleges in Telemark were a major obstacle in reaching these goals. Furthermore, in addition to the obvious academic differences, each of the previous colleges had their own specific academic tradition and culture that from their point of view made co-operation less natural. Thus, local actors suggested among others to establish either two or three independent colleges in the county (Dahl 1999). This must however also be seen in the light of uncertainty connected to future power relations and status in the academic hierarchy – especially between the regional college and the teacher training college. As a consequence the different units spent much time "marketing" themselves in the reorganisation process.

However, the merger process at Telemark College can be characterised as a top-down process. In spite of regional and local participation in the process, central authorities made decisions that to a high degree were opposite of the institutions recommendations in questions concerning both organisational structure and location of the central administration body. As consequence, the merger process at Telemark College was characterised by a lot of tensions and conflicts among both administrative and academic staff. During the amalgamation process there was also some disagreement about which campus should have central management and the main administration, a debate that for years was a source of conflict at the institution. The Porsgrunn Campus, which educates engineers, drew the longest straw, while the Bø Campus which has the most students in core subjects lost some influence.

During the process the central authorities stressed that an important goal was that the new merged state colleges should to a large extent establish departments across the previous institutional borders in order to integrate parallel or allied subjects. The main intention was to strengthen the academic faculties/departments, and was in particular related to common or allied subjects in the previous teacher training colleges and the regional colleges. However, with respect to the internal structure at Telemark College, the central authorities accepted that the geographical conditions were special in Telemark County. Thus, the departments at Telemark College to a large extent reflect the previous institutional boarders. As a consequence there are few new and common formal arenas established at the departmental level. Furthermore, there are both weak ties and structural holes in the organisational network. According to the network theory this might affect among others, the administrative and academic effects of the merger.

Both central and local actors were however aware of the challenges with regard to integrate and meld together the different units at Telemark College, and special emphases were put on these issues. In order to achieve integration in administrative functions as well as in teaching and research, effort were made to be as independent as possible of time and space. One important tool was to develop a technological infrastructure that to some degree "eliminates" the importance of large geographical distances between the nodes/campuses, for example by the widespread use of advanced communication such as the Internet, e-mail, telephone and videoconferencing. The word "eliminate" is however set in quotation marks to illustrate that even good technology cannot directly replace personal contact in a satisfactory manner (Törnqvist 1990). A well-functioning technological infrastructure could, however, mean that people feel that the distances are shorter. Telemark College got extra resources to build up its technological infrastructure when it was established as a multi-campus organisation. It was a pilot college in the so-called compact project initiated by educational authorities. This meant that Telemark College was the first college in the country, which established a modern information technology network in relation to telephone and data communication (the Internet and e-mail), as well as conditions for videoconferencing and distance education. The physical transportation of people, however, was not given high priority, and private transportation has to be used when personnel from different campuses meet "face-to-face". Several of the interviewees made the point that even if information technology overcomes certain obstacles, people still have to meet from time to time, especially in academic matters (Skodvin and Stensaker 1998).

The outcomes of the merger

When looking more closely at the results of the merger we will distinguish between the following three dimensions: *administrative, economic and academic effects.*

Administrative and economic effects

One of the presumptions of the college reform was that the merger of colleges to larger units would result in lower administrative costs by better utilisation of administrative staff, a more professional administration and economies of scale due to among others numbers of administrators. With regard to Telemark College and other network colleges, the Ministry in particular addressed the question of the organisation of the administration. It was pointed out that distance and size probably were the most important factors to consider in the creation of the administrative service, in addition to students and academic staff should be of high quality in all parts of the college despite the distances to the central administration and the size of the academic departments. What are the main effects regarding these issues?

First, the degree of geographical distance between the sub-units of a college has proved to have an impact on the administrative structure. It should be expected, to judge from the signals from the ministry concerning the administration at network colleges and from the theoretical judgements about greater challenges at colleges with geographically separated campuses, that Telemark College as well as other network colleges would have a larger administration than co-localised colleges. The differences are, however, relatively small, whether we look at the ratio between academic and administrative positions, ratio of the administrative positions to the total number of positions or number of students per administrative position (Skodvin 1999b). On the other hand, there are great differences between the colleges in the way the administration is being organised. Due to geographical distances; Telemark Colleges (as well as other network colleges), has a relatively small central administration, and larger faculty administrations. Of the administrative staff 37 per cent is in central administration, and 63 per cent at the faculty level. In contrast co-localised colleges on average have 72 percent of the administrative staff at central level.

Second, the geographical distance between the units at Telemark College has had an impact on the infrastructural network. The extra resources that were allocated to all the state colleges for the extension of their technological infrastructure, and the allotment of extra resources to colleges with geographically separated campuses, offered an important basis for the technological networks of Telemark College to get established so fast and without the great start-up problems that often characterise the introduction of new technological network. In spite of the successful technological establishment new technology does not fully replace the functioning of face-to-face meetings. It only offers a good supplement for partners who are already acquainted. However, it must be emphasised that Telemark College uses the administrative advantages of networks. The increased size of the college after the merger has led to a more efficient use of resources in the areas of budgeting, personnel and academic administration. It can be said that this was absolutely necessary due to the economic reasons. During the reorganisation of the state colleges, educational authorities tightened the budget. According to the management at Telemark College, there has recently been a major decrease in the budget. At the same time, experience shows that economic flexibility is important during processes of reorganisation (Goedegebuure 1992; Harman and Robertson-Cuninghame 1995; Harman 1996). The budget reductions, however, meant that it was very difficult to achieve such flexibility. In general mergers lead to an improvement in management, organisation and administration. This particularly pertains to the administration, which usually becomes more professional and efficient. At Telemark College there are different point of views regarding the extent to which the administration has become more professional and efficient. Senior faculty and administrators thought that the reform had resulted in increased efficiency and professionalism in the administration, however, this opinion was far less common among junior faculty. They thought that more bureaucracy was a negative effect of the mergers (Kyvik 1999).

There were no significant economies of scale with regard to the number of administrators at Telemark College. Although some duplicative administrative functions have been eliminated, the merger has so far not resulted in fewer administrators in total. Furthermore, the leadership at Telemark College underlined that it is more expensive to run a network institution than an institution with one campus. They claimed that even though data technology, telephone network and videoconferencing systems are being used, it seems obvious that it is more expensive to run a college like Telemark because of the infrastructure and indirect costs for travelling. If the leaders live up to what they in theory should be doing as leaders of the college, travel expenses would have to be much higher. However, in practice Telemark College does not have sufficient resources for this. "It is more expensive to run a network institution than an institution with one campus. This seems obvious, even though we use data technology, a telephone network, and a videoconferencing system; it will still be more expensive concerning infrastructure and indirect costs for travelling, than to run a college in Telemark which is one institution". These economic limitations reduce travelling between campuses, also for leaders. This in turn has consequences for building up relations between personnel. As one leader at the central administrative level regrets; "It's definitely no management by walking around ... If we were supposed to live up to what we should be doing as leaders of the college, travel expenses would have to be much higher. Unfortunately, we simply do not have the resources for that". In this respect, these economic limitations reduce travelling between campuses for the leaders. This in turn has consequences for building up relations between personnel, which according to network theory is of major importance in order to integrate the newly merged institution.

Both among the administrative and academic staff it was underlined that the merger had resulted in more economic autonomy and consciousness than previously among management and staff. This was pointed out as an important fact for sharpening economic and professional efficiency.

An important condition for the creation of well-functioning *social networks* is the development of a common understanding of the overall goals of the institution. This is especially important for Telemark College

that encompass such different course programmes as teacher training, engineering, health education, and single-subject courses. This common understanding has so far to some degree developed among senior administrative staff. One explanation can be that the technological infrastructures seem to be used much more among administrative staff in inter-campus communication than among teaching staff.

Academic effects

The expectations of the ministry were e.g. that the merger should result in academic gains in the form of cross-disciplinary courses and programmes and increased co-operation in teaching and research. Experiences have shown that there have been problems, in particular, in creating academic co-operation and integration in network organisations.

What is the situation for Telemark College compared to the average of all the Norwegian State colleges? Based on the network theory it should be expected that the share of academic staff with cross-departmental academic co-operation would be lower at Telemark College, due to large geographical distances between the departments. Data from the evaluation of the state college reform indicates that co-operation in teaching is relatively less frequent at Telemark College compared to the average of the other colleges. In general, there are large differences between network colleges and singlecampus colleges. Telemark College is in fact the most extreme with regard to lack of integration and co-operation across departments and disciplines. Thus it may seem as if the potential for co-operation in teaching is somewhat greater at co-localised colleges than at network colleges. Concerning collaboration in research there are only small differences between the different types of colleges, but again Telemark College has a lower degree of collaboration.

The general picture is however that there have been few changes concerning academic integration and co-operation, both regarding crossdepartmental co-operation and joint teaching across disciplines and study programmes. According to both academic and administrative faculty at Telemark College, one major reason for this is the geographical distance between the different campuses. Based on the cultural approach, we can also argue that the cultural dimension is an important factor in an analysis of academic effects of amalgamations. This is also confirmed in our analysis of Telemark College, where the staff underlined the importance of "cultural differences" as another important reason for the lack of academic co-operation. In this respect geographical distances seem to have enhanced existing cultural, social and academic tensions.

Furthermore, the geographical landscape limits what kind of academic co-operation and integration that in fact is possible to achieve. In physically integrated colleges we find examples of joint teaching across studyprogrammes, which can be seen as an economy of scale. But there are few such possibilities for academic horizontal integration at Telemark College. The strategy has instead been to eliminate some of the parallel courses and study programmes at different campuses and to arrange for vertical academic integration within the institution. This has however been a very complex and problematic strategy, and several informants thought that there were distinct limitations regarding possibilities for collaboration and integration. One major reason, is that many of the subjects that are being taught in parallel, for instance mathematics, economics and different humanistic disciplines are based on different academic and vocational traditions/cultures. For example, teaching economics to students in the humanities requires quite another approach than teaching economics to students majoring in economics and technology, and mathematics in engineering education is quite different from mathematics in teacher training education. In spite of that, many still see some possibilities for vertical integration or to create new inter- or multidisciplinary studies that build upon basic educations. For instance, ethics may be offered to all students at Telemark College, students in teacher training can take a year to specialise at Bø Campus, and studies in engineering and economics will be more closely integrated through the establishment of new cross-disciplinary electives (Skodvin and Stensaker 1998; Dahl 1999).

Therefore, regarding academic collaboration and integration at Telemark College, it seems that a consciousness-raising process has been taking place between the units and gradually several of them recognise possibilities for collaboration, despite the geographical structure. This also illustrates the fact that mergers are time-consuming processes.

Academic staff, on the other hand, seem to have developed *social bonds* to colleagues from other course programmes only to a minor extent. The cultural and academic differences are often so large that collaboration is out of the question. Faculty generally regard the merger as an organisational and administrative reform, rather than a reorganisation initiated to strengthen teaching and research. In addition, the professional programmes, especially the previous teacher training colleges, are afraid that their distinct practice-oriented profile will be weakened if they develop strong ties to other programmes.

Although the infrastructural networks appear to be well set up in principle, they have not been used to any great extent by academic staff regarding more collaboration and academic integration. One reason for this appears to be the time at which the new technological innovations were introduced. New technology is often confusing for many in the start-up phase, and it often takes time until people become used to this technology and its possibilities (Tushman and Anderson 1986). Dougherty (1996) has called this the tension between the "old" and the "new", where the old can easily dominate, particularly in an educational and research institution where resistance to learning new technology and admitting the need for learning can be viewed as a weakness, where traditional methods for teaching and research is not questioned, where a stressful working situation due to the large numbers of students exists, as well as attitudes that new innovations are unnecessary in a situation where there is great demand for study places.

As already mentioned, modern communications have to some degree reduced the importance of distance, especially among administrative staff. But it is not the same success story for academic staff. There have been projects with distance education and "the electronic classroom", videoconferencing and teleconferencing, as well as the widespread use of e-mail, etc., but not much has happened concerning co-operation and integration across the different campuses and educations so far.

Four years after the merger only two new studies have been established at Telemark College. These studies may however only be characterised as a further specialisation of the existing disciplines within Bø Campus, and no new studies have been established across disciplines and campuses. Work is being done to establish new course programmes, but not with the idea of creating something new, but rather based on the idea of having the advantages of economies of scale.

The fact that the merger process at Telemark College was relatively conflictual with disagreements about where management and administration should be located, as well as conditions concerning the distribution of resources, have caused additional unhappiness within and between the staff. During the reorganisation process the different units used a lot of time on profiling their uniqueness, and several leaders mentioned that this, along with the time used for handling conflicts took place at the cost of primary activities such as teaching and research. Some faculty at the institution have mentioned that the merger process has resulted in academic stagnation.

One result of this is that some academic disciplines and fields of studies have not been interested in taking the initiative to collaborate across subject and disciplinary boundaries. These different cultures and the differences at the previous colleges, university ideals versus professional ideals, as well as the different competence profiles between these, appear on many occasions and make it difficult to agree on a common understanding of educational and research policies. An overall initiative, from the central administration of the institution, stimulating such collaboration appears to be non-existent. In Burt's terminology, it appears that structural holes have occurred, especially among academic staff, which have to be "filled" if the network is to function well.

More academic integration also requires more financial investment. When educational authorities cut budgets, the reaction at Telemark College seemed to be to blame the reorganisation process – that it is the merging process which is the main reason for the current lack of resources. Hence, many negative attitudes are related to the reorganisation, and many interviewees are still looking for the intended academic profit from the process. Faculty generally seems to regard the merger as an organisational, managerial and budgetary reform, rather than an academic reform to strengthen departments.

Concluding remarks

What kind of lessons can be learned from this Norwegian institutional case study? We will argue that both network theory and a cultural approach are necessary to understand both the merger process as well as the outcomes. However, it is not always clear to what extent the geographical or cultural aspects provide the most important contribution to explaining for instance lack of academic integration. In many respects they seem to be interrelated, and they can in fact reinforce each other. We will present some concluding remarks on these aspects.

This article has shown that in order to achieve increased academic integration and co-operation at a recently merged college, the infrastructural, social and organisational networks have to function in a satisfactory way. At Telemark College the *infrastructural* networks seem to be well adjusted. They are used to establish contact in particular among the administrative staff and partly also among the academic staff. However, there seems to be potential for further development of academic activities across departments by using this kinds of networks. Here one should among others take into account that it usually takes time for the users to become familiar with new technology and its possibilities (Tushman and Anderson 1986). Seen from a *cultural* approach, it can however be argued that lack of academic co-operation to a large extent is a result of cultural differences rather than of unfamiliarity with new technology. But there could also be a combination of both, especially when considering the importance of other aspects of network theory; i.e. social network.

Weakly developed *social* networks appear to be one of the main obstacles to the development of academic co-operation across disciplinary boundaries at Telemark College. There are few formal arenas where staff – especially academic, but also administrative, can meet. This is mainly due to the fact

that the five new departments located at Telemarks' five campuses reflect the previously independent colleges. Thus, in general no new organisational structures at departmental level have been established. Furthermore, there are also few informal arenas, because of the geographical distance among the units. Geographical distance becomes thus a major obstacle in at least two respects – especially when one major goal was to increase the degree of academic co-operation across both formerly independent colleges and different academic cultures. On the one hand the geographical structure in the county placed restrictions on what kind of organisational structures that it was possible to create. On the other hand geographical distance limits the development of social networks.

As mentioned, the perfect social network is where mutual interdependence exists between the different nodes in the network. The strength of the ties depends on the relations between the different units. One condition for this is that a common culture, and not least, a common understanding of the overall goals of an institution must be established. This is especially important for Telemark College, which previously consisted of different institutions with their own cultures and traditions. As shown in our analysis, a central reason for lack of integration is primarily connected to cultural differences between staff in vocational programmes and faculty in more academically oriented study programmes. In this respect, there are limitations to the extent academic synergy effects may be achieved at Telemark College. On the contrary, it is obvious that lack of mutual dependence between different academic and professional environments has resulted in weak social ties. Furthermore it seems likely that geographical distances between different academic environments enhance the problems - or preserve old barriers. Again, there seems to be an interrelation between the concepts based on network theory and cultural dimensions.

The *organisational networks* that Telemark College has built up do not appear to be well adjusted to academic co-operation and integration. As already mentioned, the continuance of the previous organisational units under a new central administration is one reason for this. However, there are also others. The first years after the merger, it was necessary to give considerable weight to organisational structure, especially with regard to administration and management. This might also explain the fact that the administrative goals to a much larger degree have been fulfilled so far compared to the academic goals of the merger. Furthermore, the general budget cuts did dominate the agenda of the institution, at least the first years after the amalgamation. Both representatives from the administrative and academic staff claimed that the economic framework conditions were so tight that the college did not have enough resources to channel into academic co-ordination, development and collaboration.

In stead, when it comes to collaboration among staff previously belonging to different institutions, it appears that already existing collaborative relations have been maintained, but that new ones have not been established. According to a *cultural approach*, this does not come as a big surprise. Organisational behaviour is affected by cultural rules, in this case the basic professional values and beliefs that are shared by different groups of academics and identity and loyalty are often more connected to the discipline than to the institution. These in fact influence the patterns of co-operation among academic staff members. Therefore, creating new organisational structures and networks will not necessarily result in voluntary co-operation. More likely, co-operation among academics – both within and across different disciplines and cultures, in general will be a result of initiatives taken by the academics themselves, and thus often build upon already existing relation – as the case is at Telemark College.

In line with our cultural approach, Levine (1980) identifies two factors, which also appear to be good explanations for both the lacking cultural social network and academic integration at Telemark College, "compatibility" and "profitability". Compatibility, "defined as the degree of congruence between ... the norms, values, and goals - of an institution and its host" - must be said at present to be very low at Telemark College. Statements that economic retrenchments came before reorganisation and that merging was first and foremost an administrative reform that meant stronger centralisation of the institution are indications of this. Stronger centralisation at an institution is, for example, a result of a reform, which stands in strong contrast to the autonomy that is both characteristic but also desired by academic employees at higher educational institutions (Clark 1994). Thus, there appears not to be too much trust in the reform and possibilities for local creative solutions appear to be small. Second, the reorganisation also seems to be marked by a lack of positive profitability, the degree to which the merger satisfied the organisational or personal needs of those it affects. The reorganisation is a state innovation initiated by the Ministry of Education and not requested as such by the employees of Telemark College. As mentioned earlier, experiences have shown that voluntary mergers usually are more successful than "forced" mergers (e.g.: Fielden and Markham 1997; Goedegebuure 1992; Harman 1996; Hill 1994; Lampinen 1995; Skodvin 1999a; Stenvall 1996).

Still, it is likely that the attempts on structural integration by merging over time will result in more academic integration, than would have been the case if the colleges in Telemark county had continued as independent colleges. There are at least two, partly connected, reasons for this. Both are related to the merging process itself. The rivalry which took place between the previous colleges during the process, partly due to uncertainty regarding future power relations as well as status in the academic hierarchy, seem to live on within the merged institution. In this sense, the Telemark case study has confirmed the fact that mergers are often connected to problems, stress, and fear. This introduces the other reason. In merger processes in general, inadequate planning at all levels often has created tensions that usually have a long-term effect on the academic development of the new institution (up to ten years). Such tensions are related to issues about teaching versus research, different competency profiles, identity and autonomy and professional education versus academia. Thus, a consciousness-raising process has to take place between the different units and cultures; they have to mature before they can recognise possibilities for collaboration and fill the structural holes. In the case of Telemark, however, one may question whether large geographical distance will prolong the time period of this process.

Notes

- 1. We will here confine the concept of network or multicampus colleges to those institutions that have campuses in three or more municipalities (Lee and Bowen 1971).
- 2. Department of Health and Social Studies (Skien and Porsgrunn Campuses), Department of Technology (Porsgrunn Campus), Department of Cultural and Humanistic Studies (Bø Campus), Department of Economics, Environmental and Sport Studies (Bø Campus), Department of Teacher Training (Notodden Campus), and Department of Education in the Arts (Notodden and Rauland Campuses). In January 1996 the two departments at Bø Campus amalgamated into one, the Department of Arts and Sciences.

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