Institutionalising teacher clusters in South Africa: Dilemmas and contradictions

LOYISO C. JITA University of the Free State MATSELISO L. MOKHELE University of South Africa

Increasingly, teacher clusters are being used as a substitute for the more traditional approaches to the professional development of teachers. With this goal in mind, many provincial education departments in South Africa have sought to institutionalise and encourage the formation of teacher clusters as vehicles for the continuing professional development of teachers. What are the challenges of this institutionalisation and to what extent has it served teachers in their quest to learn from and with each other in clusters? In this article, we use a qualitative case study approach to examine the dilemmas of the institutionalisation of teacher clusters in the Mpumalanga province of South Africa. Using mostly interview data with all the key central office administrators responsible for science and mathematics in the province, and a sample of the participating cluster (teacher) leaders and observations of their cluster activities, we discuss how the institutionalisation processes may have led to rather undesirable outcomes. We examine the way in which institutionalisation may have resulted in a reduction of the "opportunities to learn" for the participating teachers. We argue that, while the intentions of the policymakers to provide support and recognition for the teacher clusters were noble and progressive, the consequences of their intervention were somewhat negative and tended to bureaucratise clusters, thereby alienating teachers from these traditionally bottomup structures of professional development. We conclude the article by exploring what the possibilities are for teachers reclaiming the spaces created by the teacher cluster "movement" in South Africa.

Keywords: teacher clusters; teacher networks; professional development; collaboration; South Africa

Introduction

Many countries, including South Africa, have in recent times taken steps to change their school curricula to incorporate new subjects, new perspectives and new ways of learning and assessing the content. In some of these countries, the professional development of teachers has also accompanied these new initiatives in curriculum development and learning. These professional development initiatives are based on the view that, for teachers to teach the new curriculum material differently, to incorporate the new perspectives, and to cater for diverse learners in increasingly multicultural contexts, the teachers themselves have a great deal of learning to do (Borko, 2004; Spillane 2001; Cohen 1990). What is not clear, however, is how such learning can be constructed and organised through professional development programmes that respond adequately to the teachers' diverse needs and challenges. That is, what kinds of professional development programmes would best meet the diverse needs of the teachers in the various subjects? This question is made even more complex by the fact that there is not a consensus, in the literature, about the meaning of professional development and its relation to teacher learning (Fraser, Kennedy, Reid & McKinney, 2007; Evans, 2002). How then do we begin to orchestrate programmes for teachers to learn and develop from when there is no clarity on the very meaning of the concept "professional development"?

While not attempting to be definitive in our view of teacher professional development, in this study we are informed by Evans's conception of teacher professional development as a process that involves the improvement of teachers on at least two fronts, namely the "attitudinal and functional dimensions" (Evans, 2002). Using that conception, therefore, it is possible to argue that the recent investments in teacher

professional development have not delivered adequately in terms of influencing the teachers' "motivation and intellectual engagement" with their work nor have they significantly changed their "procedures and the what and/or how much they produce or do at work" (Evans, 2002:131). These are some of the most critical elements and dimensions that teacher professional development seeks to influence. Although this is particularly the case in South Africa (Jansen, 2001; Jita, 2004; Kahn, 1995), the situation is not entirely hopeless. Some of the most promising approaches to the professional development of teachers have been those that seek to target teachers within the multiple contexts of their schools and classrooms; in other words, the school-based professional development programmes for teachers. Teacher clusters are one such recent experiment designed to bring teacher professional development closer to the classroom. Other researchers and scholars refer to the teacher clusters as "teacher communities of learning" or "teacher networks" (Lieberman & Grolnick, 1996; Lieberman & McLaughlin, 1992; Adams, 2000).

Although the teacher cluster or network approach has gained popularity in countries such as the United States of America (USA) and the United Kingdom (UK), research on its efficacy in changing teachers' perspectives and practices is not conclusive. In fact, Lieberman and Grolnick (1996) contend that little is known about how such networks are formed, what they focus on, and how they develop teachers. Although we now know a little more about the different kinds of networks that exist and their work in the various subject areas, in developing countries, the topic of teacher clusters as potential sites for professional development is not a well-researched topic.

In their discussion on teacher clusters, Jita and Ndlalane (2009) explore the "opportunities to learn" that teacher clusters in South Africa presented to science and mathematics teachers. The authors examine some of the modalities whereby clusters help teachers to challenge and change their professional knowledge and practices. They conclude that it is not only the existence of the structure – the cluster – that is important, but also the content (or agenda) and quality of the interactions within the cluster.

This article examines one "sphere of action" where professional development of teachers in South Africa takes place (Fraser *et al.*, 2007).\(^1\) We seek to take the discussion on clusters one step further, by exploring the structural conditions and overall context required for effective professional development through clusters. Our premise is that, if clusters are so important to the agenda of teachers' professional development in South Africa, we need to problematise and examine carefully the kinds of structures and conditions that are required for their effective functioning. This article presents findings from a study on the institutionalisation of science and mathematics teacher clusters in the Mpumalanga province.\(^2\) We provide a critique of the various processes (and outcomes) whereby the province sought to integrate teacher clusters into its systems and structures for teacher professional development. We argue that the drive to institutionalise and give recognition to the teacher-led initiative of teacher clusters has counterproductive consequences and tends to constrain the agenda and the interactions of teachers in the clusters.

The purpose of the study

Using a Japanese International Cooperation Agency (JICA)-funded research and development project in the Mpumalanga province as our context for investigation, we set about exploring the efficacy of teacher clusters or networks in helping to challenge and change science teachers' knowledge and classroom practices. We were primarily interested in understanding the diversity of perspectives regarding the institutionalisation of teacher clusters as a preferred form of professional development for science and mathematics teachers within the province. We also examined the reported practices within these clusters across the province to understand what it is they do, and how they do it. In this article, we explore the perspectives of some key role players, including teachers and policymakers, and the processes and consequences of the institutionalisation of clusters. We then argue that the institutionalisation of teacher clusters for professional development in South Africa has been characterised by a largely bureaucratic and controlling discourse that may, in fact, serve to undermine the very noble purpose of establishing the clusters as sites for teacher-centred and teacher-directed opportunities for professional learning and development.

Literature and conceptual framework

Numerous studies have already established that many of the approaches used to develop teachers have shown minimal results in influencing and changing the teachers' classroom practice (Cuban, 1993; Jansen, 1999; Fullan, 2001; Gottesman, 2002). Many such professional development sessions are characterised by a gap between the content knowledge that the experts offer, and the knowledge and experience that the teachers bring to the workshops. In order to begin to see possibilities beyond such traditional approaches to teacher development, it became important to identify and investigate those situations where South African teachers come together to form communities of learners (Southwood, 2002). Clusters have in the past few years been regarded as one promising approach to teacher development (Lieberman & Grolnick, 1996; Adams, 2000; Southwood, 2002). Little research on clusters has, however, been done in Africa and other developing countries.

For Lieberman and Grolnick (1988), the most common characteristics of networks or clusters are that teachers can share content knowledge, to reflect together on their teaching experiences, to give feedback and to promote collaboration and negotiation among themselves. The focus on collaboration and the sharing of knowledge and experiences among peers constitute the core pillars of a successful teacher clustering process. Prawat (1992) uses the term "negotiation" to describe this social interaction, because it involves learning and unlearning new information from equals through meaningful social interaction.

It is this sense of community and collective wisdom of the teachers that Secada and Adajan (1997) highlight in their description of clusters as a "form of professional community that provides a context within which members can come together and understand their practices". Teacher clusters, therefore, constitute one visible example of teacher collaboration and collegiality. To analyse and understand the structure and functioning of teacher clusters in the South African context, we drew to a large extent on the classical work of Andy Hargreaves on collegiality. While, internationally, a great deal of research on collegiality has focused on implementation issues such as the availability of time for sharing and collaboration, and the relation of this sharing and collaboration to the desired outcomes of building collegiality among teachers, Hargreaves' earlier work was instrumental in focusing attention on the micropolitics of collegiality. In using the micro-political perspective, the focus shifts from merely examining the outcomes of teacher clustering to an analysis of the clustering processes and perspectives. Questions about the meaning of collegiality for the participants become important. In addition, questions such as who guides and controls teacher collegiality, and other issues of power, status and resource allocation for teacher clustering become critical within the micro-political framework.

In his analytical work on the micro-politics of teacher collegiality, Hargreaves (1991) developed the important concept of "contrived collegiality" to underscore the intricacies and nuances involved in the various teacher collegiality projects. For Hargreaves and Dawe, a truly collaborative culture differs from contrived collegiality in that the former involves evolutionary relationships characterised by openness, trust and support among the participating teachers, while the latter is distinguished by administrative control of the teacher interactions, where teachers meet to work on curriculum implementation targets set by their superiors (Hargreaves & Dawe, 1990). A number of other scholars have used this framework of contrived collegiality to further illuminate the perspectives, processes and outcomes of various teacher collaboration initiatives in many developed countries (Blase, 1991; Leithwood, Jantzi & Steinbach, 1999).

The emergent consensus from that literature identifies five key features that define "contrived collegiality". Contrived collegiality is first and foremost characterised by administrative regulation of the teacher collaborations, where district or other officials of the education departments provide instructions and set the agenda and goals of such teacher collaborations. Secondly, such collaborations are characterised by coercion and compulsion, where teachers are forced in one way or the other to attend the collaborative meetings. Thirdly, in contrived collegiality, the focus is on teachers addressing the implementation issues of newly introduced changes to the curriculum, even if this is done at the expense of other agenda items they might have. Fourthly, contrived collegiality is predictable, to avoid any surprises for the officials that supervise such collaborations. Closely related to the issue of predictability is the fact that, when teacher

collaboration is closely monitored and supervised from the top, there is also an expectation regarding a fixed location and space in which they have to take place.

Teacher clusters constitute one such visible example of a teacher collaboration and collegiality initiative. Although teachers have formed subject groupings of sorts in the past, the teacher cluster initiatives are mostly a post-apartheid (or post-1994) phenomenon in South Africa. The approach is therefore fairly new in the country and research on its successes and failures still limited. Our article seeks to contribute in closing this gap by reporting on one particular investigation of the structure and functioning of teacher clusters in the South African context. We use the micro-political perspective, as discussed earlier, to explore the dynamics of teacher clustering.

Methodology

Data for this article comes from a larger set of data that was collected over a four-year period of the second implementation of the Mpumalanga Secondary Science Initiative (MSSI), 2003-2007. The larger data set was generated by using a mix of qualitative and quantitative research approaches to investigate the perspectives of teachers and policymakers on teacher clusters as sites for teachers' professional development, to explore the practices prevalent in the institutionalised clusters, and to understand the possible consequences and outcomes of such institutionalisation of teacher clusters. Appropriate permission was sought from the Mpumalanga Department of Education, who were partners in the MSSI intervention project. We also requested informed consent, verbally and in writing, from all the participating teachers in the study. Only researchers on the project, as distinct from the other project partners (the MDE and JICA) had access to the research data. This article draws largely on the qualitative phases of the research, in particular the interviews. We chose qualitative methods, because the techniques provided us with opportunities to do a verbal descriptive analysis and interpret the phenomenon of clustering (Denzin & Lincoln, 1994). In order to obtain in-depth knowledge and information about the operations of the clusters in practice, we also participated in and observed a sample of 15 case studies of teacher clusters and had the opportunity to interview the leaders of these clusters. The case studies revealed a number of common features of key issues in the practice of clustering. For the larger data set, we then surveyed all the appointed cluster leaders for science and mathematics in the province (n= 120) on some of the emerging issues regarding the structure, function and outcomes of teacher clustering in order to understand the patterns within the population of these cluster leaders. Given that the research was conducted between 2003 and 2007, these innovative approaches to teacher clusters in the Mpumalanga province were almost exclusively targeted at the science and mathematics teachers. This was partly because of the perceived urgency of intervention into these subjects in South Africa, where the majority of teachers are ill-qualified or underqualified to teach science and mathematics, especially at the senior high-school levels (Kahn, 1995; Taylor & Vinjevold, 1999).

Findings and discussion

We now turn to a discussion of some of the key findings from the four-year study of the institutionalisation of teacher clusters in South Africa. We focus specifically on three major findings regarding the existing perspectives about teacher clusters, the operations of the clusters, and the consequences of the science and mathematics teacher clusters in the Mpumalanga province.

First, we explore the dichotomy that exists between the perspectives of the central office administrators in the province and those of the participating teachers. Secondly, and following from these primary findings, we discuss the contradictions and dilemmas in the focus, operations and success of the different clusters across the province. We illustrate specifically how it is that a majority of the clusters in the province found it difficult to construct an agenda regarding professional development and teacher learning, and were pre-occupied with mandated administrative functions and roles. Finally, we highlight briefly an emerging trend that is partly fuelled by the apparent misdirected focus and bureaucratic control of the teacher clusters, namely a movement away from the formal clusters to what we have identified as the "alternative clusters". Although the latter phenomenon was still small and emergent at the time, we felt

it necessary to draw attention to it as an example of the possible consequences of an institutionalisation process "gone wrong" in that province and elsewhere.

Our interview data was generated both from conversations with all the key provincial office managers (n=10) working in science and mathematics at the time, and from another set of interviews with a limited sample representing all the teacher cluster leaders from one region of Mpumalanga (n=15). On the basis of this data, we analysed the dichotomy of perspectives: where the managers tended to view the clusters as one useful additional structure to the bureaucratic channels from head office to the schools and, in contrast, where the teacher cluster leaders expected the clusters to serve as important vehicles for teachers' professional development and learning.

The administrative or structural view of a cluster

Among the major role players we interviewed, two distinct views emerged on the conception of what a cluster is. On the one hand, a cluster meant "a number of schools that are situated within a specific radius that can work together as a group". That is, a grouping of neighbouring schools constituted a cluster. On the other hand, a cluster referred to "a group of teachers" who work together on some specific subject matter issues. Among the senior education administrators in the province, the dominant view was that of a "group of schools" which can be brought together for some kind of collaboration. The conception of clusters as "groups of schools" coming together, or what we label "the structural view", appears to make the most sense administratively, because of its potential to simplify administration and communication from the central office to the schools. Whenever administrative decisions and instruction had to be communicated to a group of schools within an area, one school would be selected and assigned the responsibility to relay the message to the other schools in the vicinity. In this structural view, a cluster merely became one of the administrative organs of the Department of Education that could help to simplify the management of schools, in particular the remote and hard-to-reach schools. The structural view of clusters is exemplified in the following response from one senior (provincial) central office manager:

But a cluster approach would mean that we have a cluster leader and teachers will be coming together to be trained by the cluster leader. But we are saying the training would not come from the cluster leader only. That very interaction between teachers is another intensive training that each teacher will gain from the interactions among themselves. And then we get a sort of a forum where we can channel resources through the clusters in the form of (teachers') guides and whatever material. And the curriculum implementers (or subject advisors) also if they have the schedule of the cluster meetings they can plan such that in each term they are present. One could say in each term each of the cluster leaders would have had a curriculum implementer in their meeting for other information which the cluster might not have, but the curriculum implementer might have. In a nutshell, each teacher would get more in-depth training through clusters than when we rely to the HOD at the school to be the only point of contact with the teacher.

This quotation from the central office manager clearly reveals that he seems to appreciate and value the role of clusters in providing spaces for teachers to collaborate and learn from one another. However, his view of clusters does not end there. He goes further and begins to appropriate their role and articulates it in terms of the managerial purposes in exchange for providing the required resources. For example, the references to the roles of the curriculum implementers and the cluster leaders in guiding or directing the agenda of the teacher clusters towards what is required during the implementation of the new curriculum are very obvious. The apparent contradictions in terms of the role of clusters in teacher development versus the bureaucratic imperatives are not surprising, given that the goal of central office in this case had been to find ways of institutionalising what they had also found to be a useful and grassroots vehicle for teacher development. In that sense, therefore, their intentions on institutionalisation had been well meaning.

In pursuit of the institutionalisation project, central office developed a set of guidelines in what became the "clusters framework document". The document set out a number of conditions and guidelines for the formation of the clusters in the province. Some of the guidelines in the document included the

requirement that the schools in a cluster had to be within a 10 km radius from one another, within the same administrative unit called the school circuit, and had to include only teachers working within the same level of education, be it primary, secondary and/or high school.

An illustration of how the structural view had managed to find its way further down the management units of the provincial education bureaucracy was when a senior official at the district level argued in one of the cluster workshops that "clusters are a way of reaching all schools in a better way than to go to each individual school". The district official further argued that the clusters helped to "create uniformity amongst schools", since it was difficult for them (as officials) to reach all the schools in the province when relaying instructions and ensuring that processes were followed uniformly as required by their policies.

By the third year of the intervention project, there were 52 clusters in the Mpumalanga province; this corresponded with the 52 administrative circuits that existed (an administrative circuit being the lowest administrative office within the provincial departmental structure). Each cluster (of schools) was further subdivided by subject area, such as the natural sciences, mathematics, etc. As provided for by the guidelines in the framework document, each cluster had to be approved and registered officially by the local office of the department of education (i.e. the circuit office). The framework document further specified, among other things, the terms of office of the cluster leaders, the number of reports that each cluster had to submit per school term, the procedures of meetings, the approval of meetings, and the need for invitations to be issued by the subject advisors and the circuit managers before being circulated to the teachers in the cluster. Clearly, the guidelines had managed not only to institutionalise the clusters by providing them with an official stamp of approval, but had also created a fairly elaborate bureaucracy around their operation. Teachers and cluster leaders could no longer call meetings based on their own felt needs and convenience at the time, but had to negotiate with the circuit management and/or their subject advisors for approval. As we participated in the cluster meetings and interviewed the leaders about their election, we observed another component of bureaucratisation-cum-institutionalisation in the procedures set out for electing cluster leaders. The cluster leaders, who were themselves classroom teachers, were mostly nominated and/or recommended by the subject advisor, although they still had to be elected by the members of the cluster, with the subject advisor acting as the electoral officer whenever elections were necessary. Again, we noticed the apparent contradictions in providing for cluster leaders to be elected by the teachers in their clusters while also predetermining somewhat who could be in the pool of nominated possible leaders. On the one hand, the provincial bureaucracy recognised the need for cluster leaders to be elected by the teachers in this grassroots movement, but somehow could not fathom the possibility of any teacher being nominated. Senior administrators advanced the rationale that the leaders of the clusters needed to be the "best teachers" who could be exemplary. Again, the structural view is evident in that rationale which seems to view the cluster leader as an appendage of the circuit or district management team. The structural rationale, therefore, misses a key point about the form and function of clusters, namely that clusters, as a form of grassroots initiative of the teachers, were about sharing where everyone brought something and also took away something from the cluster rather than the leaders being the focal point.

In terms of the guidelines, the cluster leaders had a term of office of one school year, which could be extended for another year. Structurally, therefore, the cluster leaders then became the most important role players in these official teacher clusters. They attended the training, received the study guides to be distributed to the teachers, communicated the messages from the head office and other officials and, most importantly, began to receive some modest payment (in addition to their normal salaries) when they performed moderation of assessment duties in their clusters. It was not surprising, therefore, to find that the official clusters in the province revolved to a large extent around assessment and moderation activities and very little else to foster the teachers' professional development. These were the paying activities, so to speak! It became clear that the exigencies of the new curriculum implementation and the concerns with end-of-year assessments had now overshadowed the need for professional development on the substantive content issues. Attention to these policy issues was reinforced by the payment of some of the cluster leaders for work done on continuous assessment (CASS) during their cluster meetings. The monetary

value attached to doing CASS during these meetings led to cluster leaders equating the cluster meetings with the continuous assessment (CASS) policy of the department. As one teacher put it:

Very little content knowledge is discussed at the department's cluster meetings. It is all about OBE or CASS moderation. (However) we need content knowledge in order to improve our classrooms.

At the time, Outcomes-Based Education (OBE) and the use of Continuous Assessment (CASS) approaches were the official policies of the Department of Education (DoE) in South Africa. In the conversation cited above, the teacher thus refers to the fact that all the discussions at the official cluster meetings deal with government policy issues, rather than with the substance of their teaching practice.

As mentioned earlier, while the intentions of provincial officials were noble in terms of trying to find ways of supporting the teacher clusters movement, their institutionalisation, as illustrated in the foregoing discussion of the structural view, had clearly railroaded them away from their founding purpose.

A collaborative view of a cluster

For the teachers in the project, however, the cluster concept came in handy as a vehicle for collaboration and sharing. Many of the teachers, who found the implementation of the newly introduced curriculum in the country difficult, viewed the clusters as an opportunity to solicit and receive assistance from their colleagues. This was especially important for those teachers who worked in remote schools which rarely received any formal visits and/or assistance from the subject advisors and other officials of the department. When we asked the teachers for their views on clusters, they highlighted the importance of support from their colleagues, and the fact that collaborations needed to be based on need, rather than be dictated to by administrative conveniences. A cluster (teacher) leader states his view regarding collaboration:

A cluster I can say is a group of people based on educators that you know well that meet together to share ideas and try to support one another, so that they can perform better individually in their classrooms.

The importance of classroom improvement as an outcome of the cluster collaborations is clearly not lost to this participating cluster teacher. The Mpumalanga cluster intervention project was intended, among other things, to improve the quality of science and mathematics in all the secondary (and later primary) schools of the province. The intervention to improve quality took place at different levels, namely at the level of the cluster leader workshops, the subject advisors' workshops and in the actual schools and classrooms. All these interventions focused primarily on improving the participants' content and pedagogical content knowledge.

To confirm our interview data with the selected cluster teachers, we also administered a questionnaire with the 120 science and mathematics cluster leaders who had attended all the workshops in year two of the project, to get an indication of the functioning and emphasis of their clusters and thereby an indication of how the professional development needs of the teachers were being met through these structures. We found very few instances of teachers sharing with each other on issues of content and its teaching. In fact, in all the 15 observation cases, we observed that the clusters started the process of sharing during their first monthly meeting (and perhaps once or twice thereafter), but could not sustain the sharing in subsequent meetings because of the exigencies of the policy agenda given to them by the curriculum implementers. This switch to the policy agenda by the clusters begins to make sense once interpreted within the context of the administrative view expressed by the central office administrators. It was not a random change of agenda by the clusters participants, but part of the contestation on the meaning and role of teacher clusters within the major stakeholders in education in Mpumalanga.

There was yet another way in which the teachers' view of clusters differed from that of the central office administrators. These two major stakeholders also differed in terms of how they understood the constitution or formation of the clusters, who should participate in what cluster(s), and on the freedom to associate and/or disassociate within the clusters. The following commentary by one of the cluster teacher leaders illustrates the differences of opinions between the major role players with respect to the membership or constitution of a cluster and the freedom to associate or disassociate:

I prefer to choose schools and teachers to work with, because of their competence and the good results they always get in grade 12. But the department has already selected a cluster for us. I am not comfortable to work with some teachers and other schools around.

This quotation illustrates the pattern of responses we obtained from the cluster leaders about their experiences of the clustering processes.

In summary, therefore, our data suggests that there were two somewhat contesting views on the form and function of clusters, and that these views run parallel within the Mpumalanga teacher development project. These somewhat contradictory views of the major role players in the clustering processes in Mpumalanga resulted in a set of conditions that were less than ideal for teacher collaboration and development, thereby weakening the consequences and the possibilities for teacher development that the clusters could have provided.

Alternative clusters

Almost by accident, as we continued to interview the cluster leaders about their activities and participation in what had now become the official clusters for science and mathematics teachers in the province, we discovered that other kinds of clusters in the province were operating outside the official structures, so to speak. We also uncovered the fact that these clusters had been operating long before the official clusters were formed. Their formation had for the most part been driven by the needs of the participating teachers and intermittent support, often from Higher Education Institutions (HEIs) and/or Non-Governmental Organisations (NGOs).

Unlike the official clusters, these alternative clusters focused on the need to improve the teaching of science and mathematics by sharing and working collaboratively as a team with members from various schools. Participation in the alternative clusters was voluntary and the clusters were self-directed and self-regulating. In the one example of the alternative clusters that we studied intensively, we uncovered two types of activities in these clusters: first, the teachers would identify problem areas in their subjects and then arrange to meet in order to collaboratively plan and discuss ways of teaching the identified topics. The teachers would then bring in their learners on a Saturday for actual collaborative teaching of the identified topics by the different teachers. The collaborative teaching experiences and the collective reflection of the teachers supported and enriched each one of them in terms of their own classroom practices. The arrangement provided for the learners from the participating schools to attend the cluster lessons once every month. After the day's series of lessons, the teachers in the cluster would meet and reflect on each of the lessons, with different teachers who were assigned as observers taking the lead in raising issues for discussion. One member of the alternative cluster described her experiences and reasons for engaging in this cluster as follows:

Because we want to support each other ... but if we are told by somebody senior to come on a Saturday we will not come. We support each other on content and how we teach this or that ... and 'this is what I have done in my class'. The kids will experience the real experiences from different teachers (who teach them collaboratively). When they meet on Monday at their various schools they will be talking about those teachers ... hey ... they were good.

This quote from one of the participating teachers clearly reveals the subject and classroom focus and its improvement, together with the collaborative processes of engagement in the alternative cluster. In the alternative cluster, a cluster leader, who is elected by the participating teachers, chairs the reflection session after the teaching, and keeps the minutes and the attendance register of all meetings. The ownership lies with the teachers and the principals of the schools participating in the alternative cluster. The schools supply the photocopying paper and other consumables for the workshops and cluster teaching sessions. Unlike the official clusters, more than two circuits could participate in these clusters, and teachers across grade levels were engaged in one cluster. Many of these clusters had sustained themselves through their existing networks with professional teacher organisations and the institutions of higher education with which they were connected.

In general, the collective criticism of the official clusters led many of the teachers to make a decision to engage in the alternative, voluntary clusters. Since their participation in the alternative clusters was not mandatory, the teachers were happy to sacrifice their time to attend the meetings of both the official clusters (which had by now become mandatory) and their chosen alternative clusters. As one of the teachers put it, "we are to continue as before even if we have to attend meetings every weekend". Another participating teacher affirmed this commitment to, and utility of, the alternative cluster:

I am new in this school. I joined them this year. I have never taught grade 12, so from the help of this small group I have learnt so much. I can come to a cluster leader anytime and he can help us. I was not very clear with Newton's Laws, I am now confident about it. We have no support from the department whatever, whatever But as educators we are volunteering to work during our free time.

While the teachers continue to participate in the mandatory and officially recognised teacher clusters of the province, some have begun to invest time and energy – at their own initiative – in alternative clusters that are self-directed, and to focus on the core issues of teacher development and classroom improvement. It is this shift away from an officially sanctioned and supported clustering initiative, supposedly to encourage teacher collegiality and learning, which should be of concern to policymakers and researchers alike. The question to ponder is: if the intention was to legitimise and provide resources for the original grassroots initiative of teacher clustering, then what went wrong? Why is it that what was once a grassroots movement has now been so bureaucratised as to repel the very people it is intended to assist? Part of the answer to these questions may arise as we revisit and study carefully the emergent alternative clusters movement. In a follow-up study, we conduct a more elaborate investigation of the alternative clusters in order to develop insights about how better to institutionalise and support teacher clusters in South Africa and elsewhere.

Conclusion

It is clear that the systematic takeover and creation of conditions for contrived collegiality did not emerge because departmental officials had malicious intentions of constraining or even taking over the teacher clusters. On the contrary, they had every good intention to support the teachers in their professional development. They were trying to provide teachers with recognition (by rewarding the cluster leaders, for example). They were also trying to give them the necessary space and time to meet and collaborate through the permission granted by the circuit managers. In addition, it would appear that the provincial education office also wanted to provide the necessary physical resources (space), material resources (teaching guides and policy documents), and intellectual resources (heads of department, cluster leaders, and subject advisors) that the teachers would need in their clusters. However, just as Hargreaves and other researchers on the micro-politics of collegiality have observed in other cases, the consequences of the institutionalisation in the present case study was that the province effectively took over the clusters and made them another arm of its bureaucracy. Although a gratuity was in fact paid to the cluster leaders who focused on the policy agenda (CASS moderation), the teachers were restricted in who they could nominate to lead their clusters; their agenda was often circumscribed and limited to curriculum implementation issues coming from the central office; permission to meet could only be granted by the circuit manager if the agenda met his/her approval, and teachers no longer had a choice of whether to attend or not, but were compelled by the circular from (or endorsed by) the circuit manager or curriculum implementer. The result of this unintended takeover was that the teachers did not enjoy participating in the formal clusters. The clusters began to represent officialdom and, where possible, teachers deliberately stayed away from the meetings or simply "dragged their feet" when called on to attend these meetings. Gradually, some teachers began to gravitate towards existing alternative clusters or simply formed their own alternative clusters, which were not recognised by departmental officials, who might not even have been aware of their existence. The teachers opted to sacrifice their own time and resources to meet at weekends and during school holidays in their alternative clusters.

One of the most critical contributions of the present study lies in its ability to shed light on the complex processes and dilemmas involved in taking what is otherwise a grassroots initiative of teachers to learn

from each other, and formalising it with the aim of providing recognition and institutionalisation within the structures of government. This article argues that, while the intentions of the policymakers to provide support and recognition for the work of teacher clusters were noble and progressive, the consequences of this intervention were somewhat negative and tended to bureaucratise and alienate teachers from these traditionally bottom-up structures of professional development. In exploring the dilemmas and challenges of the institutionalisation of teacher clusters, we have identified the need for officials to be measured and cautious when seeking to recognise these grassroots structures of teacher development. This article also uncovered the low-key, but important and previously unrecognised movement from formal clusters to what we have labelled "alternative clusters". It would be important to study this alternative clustering process closely, with a view to exploring possibilities for a reconciliation of the formal and the (re) emerging alternative cluster movements in South Africa in pursuit of a more robust and inclusive agenda for teacher professional development in the country. Strictly speaking, the latter is, however, a separate discussion from the present exploration of institutionalisation.

References

Adams J 2000. *Taking charge of the curriculum*. Colombia University, New York: Teachers College Press. Blasé J (Ed) 1991. *The politics of life in schools*. Thousand Oaks, CA: Cornwin Press.

Borko H 2004. Professional development and teacher learning: Mapping the terrain. Educational Researcher, **33(8)**:3-15.

Cohen DK 1990. A revolution in one classroom: The case of Mrs. Oublier. *Educational Evaluation and Policy Analysis*, **12(3)**:311-329.

Cuban L 1993. How teachers taught: Constancy and change in American classrooms 1890-1990. 2nd edn. New York: Teachers College Press.

Denzin NK & Lincoln YS 1994. Handbook of qualitative research. London: Sage Publications.

Evans L 2002. What is teacher development? Oxford Review of Education, 28(1):123-137.

Fraser C, Kennedy A, Reid L & McKinney S 2007. Teachers' continuing professional development: Contested concepts, understandings and models. *Journal of In-service Education*, **33(2)**:153-169.

Fullan M 2001. Leading in a culture of change. San Francisco, CA: Jossey-Bass.

Gottesman B 2002. Peer coaching for educators. Maryland: Scarecrow Press.

Hargreaves A 1991. Contrived collegiality: The micro-politics of teacher collaboration. In J Blasé (ed), *The politics of life in schools*. Thousand Oaks, CA: Cornwin Press.

Hargreaves A 1992. Contrived collegiality: The micro-politics of teacher collaboration. In N Bennett, M Crawford & C Riches (eds), *Managing change in education: Individual and organizational perspectives*. London: Sage, 80-94.

Hargreaves A 1994. Changing teachers, changing times: Teachers' work and culture in the postmodern age. London: Cassell.

Hargreaves A & Dawe R 1990. Paths of professional development: Contrived collegiality, collaborative culture, and the case of peer coaching. *Teaching and Teacher Education*, **6(3)**:227-241.

Jansen JD 2001. The race for education policy after apartheid. In Y Sayed & JD Jansen (eds), *Implementing education policies: The South African experience*. Cape Town: University of Cape Town Press, 12-25.

Jita LC 2004. Resources of biography: Teacher identities and science teaching. *Perspectives in Education*, **22(4)**:11-27.

Jita LC & Ndlalane TC 2009. Teacher networks or clusters in South Africa: Opportunities and constraints for teacher development and change. *Perspectives in Education*, **27(1)**:58-68.

Kahn M 1995. Some policies, processes and implementation issues facing science education and training in post-apartheid South Africa. *International Journal of Science Education*, **17(2)**:441-452.

Leithwood K, Jantzi D & Steinbach R 1999. *Changing leadership for changing time: Changing education series.* Florence: Taylor and Francis Group.

Lieberman A & Grolnick M 1996. Networks and reform in American education. *Teachers College Record*, **98(1)**:7-46.

- Lieberman A & McLaughlin M 1992. Networks for educational change: Powerful and problematic. *Phi Delta Kappa* **73**:673-677.
- Lieberman A & Miller L 1991. Staff development for education in the 90s. New demands, new realities new perspectives. New York: Columbia University: Educators College Press.
- Prawat RS 1992. Teachers beliefs about teaching and learning: A constructivist perspectives. New York: Falmer Press.
- Secada WG & Adajian L 1997. Mathematics teachers' change in the context of their professional communities. In BS Nelson & E Fennema (eds), *Mathematics teachers in transition*. Hillsdale, NJ: Erlbaum, 193-219.
- Southwood S 2002. *Towards a collaborative approach to teacher development: A journey to negotiation*. Unpublished doctoral thesis, Grahamstown, Rhodes University.
- Spillane J 2001. Constructing ambitious pedagogy in the fifth grade: The mathematics and the literacy divide. *Elementary School Journal*, **100(4)**:307-330.
- Taylor N & Vinjevold P 1999. Getting learning right. Johannesburg: Joint Education Trust.

Endnotes

- We take note that Fraser *et al.* (2002) develop an interesting conceptual scheme that uses three dimensions, namely the domain of influence, the capacity for professional autonomy and transformative practice, and the sphere of action, to evaluate Professional Development (PD) interventions. The present study has a slightly different focus, however, in that we seek to examine and unpack the institutionalisation processes for one government-selected sphere of action the teacher clusters or networks.
- 2 Mpumalanga is one of the nine provinces of South Africa situated in the Eastern corner of the country and bordering Mozambique and Swaziland.