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A TALE OF TWO PROJECTS

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Introduction

In this paper I shall use my experience of working in two foreign aid-supported projects in South Africa to reflect on several important aspects of project planning, implementation and evaluation. South Africa is unique in that it is both a developed and a developing world country, and therefore in some senses it is a microcosm of the entire world. Parts of South Africa have all the material, technological and highly-skilled human resources common in the developed world, whilst in other parts of the country people suffer great deprivation, both material and educational.

The first project I shall refer to is the Science Foundation Programme (SFP), which began in 1991 at the University of Natal in South Africa. For the first four years funding for the SFP came largely from US Aid. The programme was designed to identify academically talented but underprepared black students who wished to obtain a degree in science or an applied science (engineering, medicine or agriculture) and who had the potential to succeed, and then help these students develop their potential. In particular, through a one-year pre-degree programme students were helped to develop the underlying knowledge, skills and attitudes that would enable them to succeed in later science studies, and indeed, to become life-long learners (Grayson, 1996,1997). In 1995, after the initial donor funding ended, the project was transformed into part of a credit-bearing extended degree programme and is still running today. My role was to coordinate the programme, as well as teaching the physics component.

The second project I shall refer to, the Mathematics, Science and Technology Education College (MASTEC), is much younger, commencing only in 1997. MASTEC was established by the Minister of Education of the Northern Province, one of the poorest and least developed parts of South Africa, in order to try to improve the quality of mathematics, science and technology (MST) education in his province. The project consists of a new college, established specifically as part of the project, for the initial education of MST teachers, together with a cluster of local schools. The project aims to improve MST education by working from both ends of the system at the same time, i.e. developing both pre-service and in-service teachers. On the pre-service side, new courses and teaching methods were designed to both promote more effective teaching and learning and to prepare future teachers to teach South Africa's new outcomes-based curriculum, Curriculum 2005 （Department of Education 1997）.On the in-service side, both workshops and school-based support were offered to MST teachers from the schools that form part of the project, the "MASTEC schools". At the interface between the pre-service and in-service parts of the project are the practice teaching sessions. During practice teaching MASTEC student teachers spend 20 weeks over the course of their four years of study in the "MASTEC schools", while teachers in those schools have the chance to observe students implementing the type of teaching practices introduced in the in-service workshops.

The bulk of the donor funding for MASTEC has come from the British Department for International Development and the Open Society Foundation. Additional support has been provided by the governments of the Netherlands and Belgium. Basic recurrent costs, such as

staff salaries, have been provided by the Northern Province Department of Education (NPDoE). My position was Academic Vice-Rector, i.e. head of academic affairs.

In the sections that follow I shall refer to these two projects in order to illustrate six elements of the life of a project: initial conceptualisation, planning, contingency planning, implementation, monitoring and support, and evaluation. In the last section, I shall discuss some of the successes and failures of the projects, relating them where possible to relevant literature on school effectiveness and mathematics and science education.

Initial conceptualisation

The issue of who conceptualises a project is important for a number of reasons. Firstly, those who conceive a project will naturally feel a sense of ownership and commitment to it. Secondly, the closer people are to the level at which the project will be implemented the more likely they are to know what is needed, what will work in that particular context, what the constraints are and so on. In the developing world, Gray (1999) warns against the all-too-common practice of uncritically adopting First World solutions and ways of thinking, and stresses the need to develop locally appropriate programmes and practices. On the other hand, if ideas are generated solely from within an existing situation, it is difficult to introduce new ideas- whilst a few people may be visionary, most people can not be expected to come up with ideas that lie outside their experience.

Thus for a project to be locally relevant while also drawing on ideas unfamiliar in the local context, ideally a project should be conceptualised by a group comprising two kinds of people- those familiar with the local context and needs and those with experience that extends beyond the local context. However, identification of the need for a project in the first place should come from local people, not outsiders. A project that is imposed from outside is unlikely to gain commitment from local people.

In the case of the SFP, the idea was conceptualised largely by people from within the University of Natal, in particular the Dean of Student Support and the Dean of Science. Consultation was also held with the donors. However, the coordinator appointed to run the project had considerable overseas experience, and was brought into the planning process more than a year before the programme began. The idea initially arose from a concern on the part of the Dean of Student Support that very few black students were graduating in the sciences at the University of Natal.

In the case of MASTEC, the project was initially conceptualised by the provincial Minister of Education (MEC), with input from a cognitive scientist in the USA and a member of a local scientific para-statal who originally came from the MEC's province. Further development of the idea took place in discussions with donors. The idea first arose in response to a conference that the MEC had organised on the state of science and mathematics education in his province.

Thus in both projects the initial conceptualisation and identification of the need for the project came from local people. In addition, in both cases the conceptualisation was done by a group of people that included both those with knowledge of the local context and those with knowledge that was new to the local context.

Planning

Ideally, a project should be planned in great detail, at both the macro and micro levels. In practice, it is often not possible to do this, particularly in a developing world context. There are many reasons for this, for example, there may well be political pressures to get a project up and running quickly, not allowing enough time for detailed planning. Even without such

time pressures, the skills needed for such planning may not be available if local people have had the chance to develop them and international partners are not able to spend enough time on site to participate in detailed planning.

Another potential problem is that the planning may be done at a level that is too superficial, such as ascertaining only whether or not certain resources are available without assessing the quality of those resources. In particular, in the area of human resources it is important to perform a realistic analysis of the capacity of the available people to perform the tasks expected of them in the project. For example, if a project is designed to promote innovative ways of teaching it is not enough to appoint teachers. The teachers appointed must either have experience and expertise in innovative teaching methods or else the project needs to explicitly include a process through which they can develop such experience and expertise.

A sound planning process should evaluate the "distance" between the starting point, that is, the initial conditions, and the desired end point or project goals. In determining how to get from one position to the other, it is important to take into account how much capacity building will be needed along the way. Where this is not done adequately, a project may be stalled or even derailed. As a result, project goals may have to be lowered or else time frames have to be extended (figure 1). The consequences of such modifications can be serious if the project is reliant on donor funds with a strictly controlled time frame. The human consequences can also be serious if people involved with the project become demoralised because their expectations cannot be met.

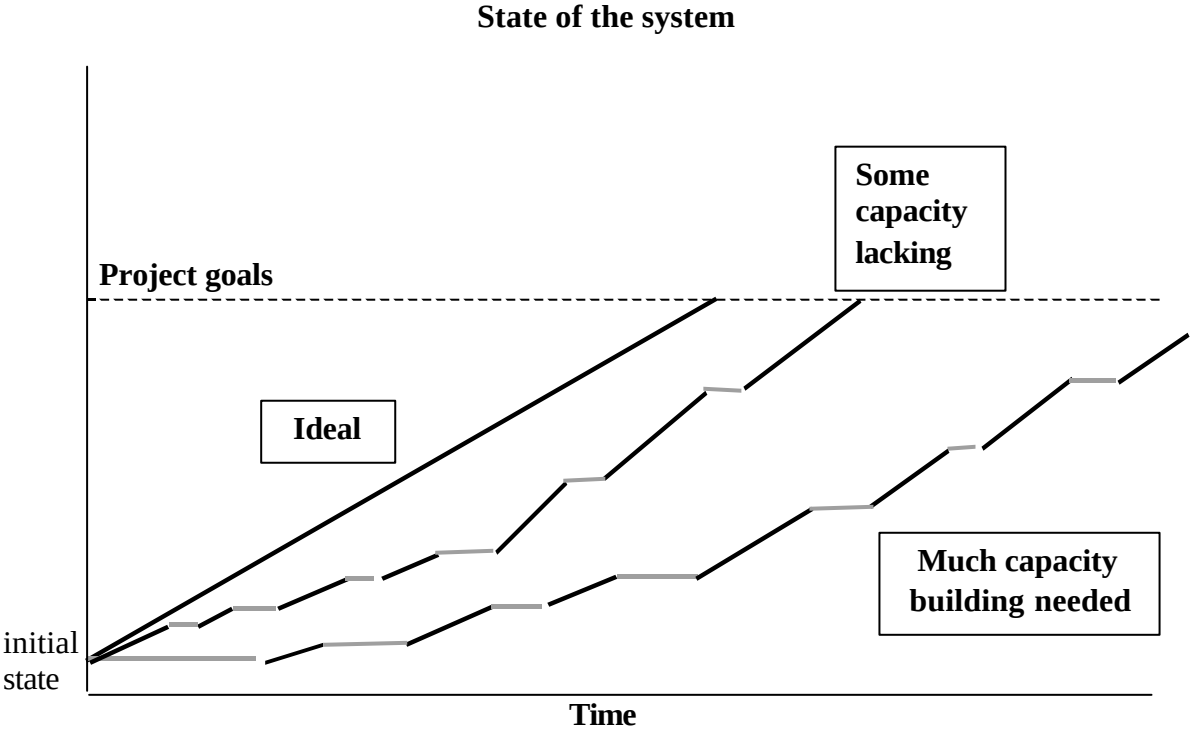

Figure 1: Progress of a project over time. Dashed lines represent time spent exclusively building capacity; solid lines represent time spent moving closer to project goals.

In the case of the SFP, the start of the programme was unexpectedly delayed by a year because the appointed coordinator had to complete doctoral studies overseas before taking up the post. This delay, though frustrating for the initiators of the programme, was a blessing in disguise. An intended planning period of 6 months turned into a period of 18 months. This extended period made it possible to do much more careful and detailed planning than

originally intended. When the coordinator took up the position, six months before the first student intake, the general structure of the programme had been planned. Donor funding had been secured and the first group of students had already been selected. Most of the teachers for the programme had also been selected, and curriculum advisers from the various science departments had been involved in helping plan the courses. Nonetheless, many details still had to be worked out. For example, a physical space had to located on campus to function as a centre for the programme's activities, and money had to be raised to modify and equip it. Negotiations with science departments were needed allow SFP students to use their laboratories without interfering with the mainstream courses. Many other such details had to be finalised. However, by the time the programme began all the essential elements needed for it to run fairly smoothly were in place.

One of the most important things that took place during the additional planning year was human capacity development. The staff who would teach on the SFP were all experienced teachers and had strong content knowledge of their subjects. However, they were unfamiliar with current theories of learning and teaching of science. They were also used to working as individuals in isolation from colleagues, the norm for university teachers in South Africa. The coordinator felt strongly that the programme would only be effective if all teachers adopted the same educational philosophy, and if the course structure and teaching approaches were designed to embody this philosophy. This view is supported by Lockheed and Levin (1993), who identify the presence of a common, central philosophy as an important element in developing effective schools.

The SFP's philosophy was centred on the belief that students, especially those from disadvantaged backgrounds, needed to develop a variety of academic and life skills, not merely content knowledge. Such skills could only be developed in a context within which students would be actively engaged. For the teachers, this meant a radical shift in how they taught and constructed their courses. The additional year of planning made it possible for the future SFP teachers to develop a shared educational philosophy and design courses based on that philosophy. A considerable shift in the teachers' understanding of what they needed to do and how to do it took place during that time (Grayson 1996).

In the case of MASTEC, the situation was more complicated. A 14-person steering committee, convened by the MEC, met bi-weekly for 6 months to plan the project. During this time, discussions were held with potential donors to solicit support. In fact, the major donor (British DFID) had already expressed an interest in working in the province. The steering committee contained members of the Northern Province Department of Education (NPDoE), the local universities, a national science parastatal, and the cognitive scientist from the USA who had moved to SA in her retirement to be science education adviser to the NPDoE.

The planning process focussed on what I would consider macro issues. A location for the college was found, draft curricula were developed, suitable project schools were identified, and advertisements for teaching and management staff went out. However, micro-level planning was not done. So, for example, it was decided that the premises of an education college that was being phased out at the end of the year could be shared with MASTEC for the first year. The possible effects of having a new and financially privileged initiative share facilities with a group of students and staff demoralised by the imminent closure of their institution were not sufficiently thought through.

The capacity issue in particular was not addressed. The teaching staff were expected to develop new curricula and use new methods of teaching, but most of them had neither developed curriculum before nor had they used the innovative teaching methods the project was supposed to promote. Although a few weeks of workshops were held before the college opened, the capacity of the staff to do what was needed from them in order to achieve the

project goals had not been realistically assessed. As a result, many intended activities had to be slowed down or modified to allow time for staff to develop the necessary skills and experience, i.e. for capacity-building. At the management level, the situation was even worse. Of the planned three-person management team, only the administrative vice-rector was appointed by the time the college opened in February of 1997. Of necessity, she also had to function as acting rector, a role for which she had inadequate experience and skills. The academic vice-rector was only appointed in April, and the rector only in October. None of the three management members had received management training, nor was there any planning for such training.

Contingency planning

In any project there will be unexpected glitches. However, in a developing world context there may be serious unexpected roadblocks. Is it possible to plan for such unexpected events? Is this not an oxymoron?

I think there is a sense in which it is possible to "expect the unexpected". If this stance is adopted then safeguards can be built into a project. Possibly the most effective form of safeguard is a very close and regular monitoring system, especially in the early stages of a project. For close and regular monitoring to take place and be effective there needs to be at least one person who has close and regular contact with the project at the level of its daily operation. This person also needs to either be able to make modifications herself or else to have ready access to someone with the authority and commitment to see that needed changes are made or obstacles removed.

Another type of safeguard is a certain built-in flexibility in the project design, so that if the wind changes direction the sails can be altered accordingly whilst maintaining the same general direction of travel. Flexibility is more possible if a project does not start on too large a scale.

In the case of the SFP, the unavailability of the coordinator when the project was due to start led the project initiators to delay implementation by a year, a kind of contingency planning. This required negotiation with a variety of stakeholders, including those who would become the teaching staff and the donors. In the long run, the project did not suffer as a result. If anything, the project was probably more successful because of the longer planning period that became available.

In the case of MASTEC, the project was due to begin in January 1997 but by this time only one member of the management team had been appointed and the project funding agreements had not yet been finalised. The planners had not made provision for such an eventuality and went ahead with the project anyway. Ten lecturers and one management person had the task of getting the college up and running as well as developing eight new courses and teaching 160 students. Under these circumstances it was impossible to start the in-service part of the project, and the introduction of this component of the project had to be delayed by a year.

Clearly it would have been desirable to delay the start of MASTEC until all the management staff, teaching staff, funding and facilities were in place. Whether this could have been done given the political pressures of the time is another question. On the other hand, starting the project under such adverse conditions nearly caused the whole project to collapse early on. Without the commitment of a handful of individuals, it almost certainly would have collapsed. To build a project on such uncertain foundations is precarious. The personal cost to those individuals is also great, as they are subjected to very high levels of stress.

Greater control and flexibility would have been possible had the project started on a smaller scale initially. With so many students from the beginning, problems were magnified and interventions difficult. Closer monitoring and support from someone in the NPDoE could also have helped avoid or at least better manage problems. Alternatively, someone could have been seconded to act as full-time project manager until other people were in place to keep the project running.

Implementation

If the planning has been carefully done, project implementation should be fairly straightforward. Of course, it rarely works out that way in practice. There is always a disparity between carefully-worded project documents and flesh-and-blood reality. However, the more that planners have thought through the detailed implications of their project documents, the less the chance that the disparity will be too great.

In the SFP, the relatively long period of planning, combined with the high level of capacity of both the teachers and the host institution, meant that the transition from planning stage to implementation was fairly smooth. Problems arose regularly, but none were very serious. Moreover, since the project was small initially (30 students in the first year) and the staff met weekly, it was fairly easy to solve problems as they arose. Although the planners had tried to plan in as much detail as possible, inevitably there were things they could not anticipate, such as what to do when the carefully-planned teaching programme was upset by a campus-wide strike by black students. There were some aspects of the programme that clearly needed improvement, but they did not threaten the project. Where possible, improvements were made during that first year, but other improvements could only be made in later years.

In MASTEC in the first year the disparity between what was supposed to happen and what did happen was immense. Problems arose almost immediately, which nearly led to the collapse of the project within the first few months of its existence. As mentioned previously, at the time the project started only one management member, the administrative vice-rector, had been appointed. Of necessity she had to be acting rector, but she was out of her depth and largely unsupported by anyone more senior or experienced. Teaching staff battled to develop curriculum for new courses, a task most of them had never performed before, at the same time as teaching such a large number of students. The acting rector's inability to process staff requests for equipment and supplies, together with the late availability of donor funds caused further frustrations for the teaching staff, as did inadequate facilities for producing and copying teaching materials. Tensions between staff and students of MASTEC and those of the outgoing college who shared the premises ran high. Early in the year, students of the outgoing college locked MASTEC students out of the college. The MEC had to be brought in to mediate. None of the procedures for running a college were in place in advance, and often procedures were only developed in response to a crisis or disruption, whilst trying to keep the teaching programme running. The list goes on.

Other problems related to the lack of capacity of the staff. Not only did they battle to develop new curricula, an activity new to most of them, but they also had problems in managing time, including having to juggle a variety of different activities and meet deadlines. A further problem was that new staff joined the project at various times over the years, making it difficult to develop a common philosophy, shared by all staff members.

The early collapse of MASTEC was prevented because the MEC took special interest in it, since this was his project (though he could not be involved in it on a daily basis because of his many other commitments). Support from the science education adviser from the USA also helped a great deal. In April the second member of the management team was appointed, the academic vice-rector, together with two new heads of department who also helped manage the college. This enlarged management team helped bring the project back from the brink of collapse. A completely unforeseen event that severely impacted on the project was the ousting of the MEC six months after the project began. The new MEC, whilst supportive, did not have the same passionate commitment to the project as his predecessor, since MASTEC was not his project.

Many aspects of the project were only implemented ten months or more after the project began. This need not have been a bad thing had it been planned that way, but it happened by default. The rector was finally appointed in October of 1997, and the project funding documents were signed in the same month. The Project Manager was only appointed the following January, as was a senior staff member who could run the in-service part of the project.

Monitoring and support

Surprises in project work are inevitable. To reduce the chances of surprises derailing a project, especially in its early stages, it is crucial for the project to be carefully monitored and for support to be provided to those who must implement it. Often a project has a steering committee that meets infrequently and deals mostly with policy issues. Such a committee cannot provide the detailed monitoring and support many projects need, especially early on.

In the case of the SFP, most of the monitoring happened through the weekly meetings of the staff. Problem areas could be raised and addressed immediately. Student performance and problems were discussed at these meetings, as were the results of students' evaluations of the courses. Each staff member submitted a written report once a term, and students submitted an anonymous evaluation of the programme at the end of the year. Quarterly reports were submitted to the donors, a steering committee met twice a year. After the programme's first year, once former SFP students entered mainstream courses, informal feedback was received from various science lecturers. Some suggestions led to changes to the programme, such as the inclusion of a drawing component when both engineering and biology lecturers commented on the problems students had with technical and scientific drawing.

Where structural support was needed, the coordinator had open-door access to the Dean of Science, who would negotiate or intervene where necessary with other parts of the university community. The Coordinator was also made a member of the Board of the Faculty of Science, and so was able to participate in discussions and decisions that affected the larger structure within which the project functioned. She was also able, through her quarterly reports to this committee, to keep members of the Faculty informed of the progress of the project, and to solicit their support where an appeal to the larger university community was needed to allow the project to run optimally.

What was lacking was sufficient support for the coordinator herself in terms of acquiring the specific financial and management knowledge and skills needed to run a project. As with many educational institutions, she was appointed on the strength of her academic credentials.

However, she should have been given project management training rather than being left to pick up the necessary skills and make mistakes along the way.

In the case of MASTEC, in the first year before the project manager arrived monitoring was erratic. Periodic staff meetings and management meetings were held, but action points emanating from such meetings were not always addressed. Efforts to gather evaluation data from both staff and students had limited success- meeting deadlines and handing in requested material were problems for staff and students alike. No one from the NPDoE visited MASTEC with any regularity, and there was no individual in the NPDoE who took it to be their responsibility to ensure the efficient running of the project. The science adviser provided a sympathetic ear and tried to get the relevant people within the NPDoE to address matters of concern, but ultimately she had no authority within the department. Although MASTEC was the MEC's brainchild, he was far too busy to be involved with the project in a routine way. The next in command, the Superintendent General, was sympathetic, but also far too busy managing the entire NPDoE. The fact that the college was 10 km from the offices of the NPDoE also provided a deterrent to regular visits from NPDoE officials (escaping from the office was not easy for them).

It was left to members of the MASTEC staff to raise concerns when they had them and to try to find some means of getting them addressed by the NPDoE. In the first year no monitoring of the project from the side of the NPDoE took place. However, towards the end of the first year a steering committee comprising NPDoE members, donor representatives and MASTEC members was established, which then met once every quarter. While this committee performed a kind of monitoring function, although from a distance, it was not the appropriate body to provide needed support to the project (other than of a financial nature). As a result, various problems dragged on, hobbling the project. One particularly serious problem dragged on for two years, and had a serious incapacitating effect on the project.

Once the Project Manager took up her post, a year after the college had opened, the situation improved markedly. Her job description explicitly included monitoring of the project. She also had substantial educational management experience. After she arrived she set up a monitoring committee comprising the rector, herself and two other senior project staff members, which met regularly. To some extent this committee was also able to identify where support was needed, and in some cases, make sure it became available, particularly where resources could be provided using donor funds. However, sometimes the support that was needed was structural and had to come from the NPDoE. This was much more difficult to access, partially due to a lack of capacity within the NPDoE itself. Support in the form of management training for members of the management staff was also needed.

Evaluation

In both of the projects discussed above, formative evaluation played a very valuable role. It was important that the evaluations were conducted by highly competent, external evaluators who were impartial, that is, they were in no way linked to any of the project stakeholders. Some of the time frames for evaluation were specified in the project documents, whilst others took place at the request of the recipients.

In the SFP, evaluations were conducted at the end of one year, two years and four years. In each case, the SFP staff drew up proposed terms of reference, which were then discussed with the donors. In this way it was possible for the evaluation to address the concerns of both

the donors and recipients. Potential evaluators were contacted by the SFP and asked to submit their curriculum vitae, together with an outline of how they would carry out the evaluation. The SFP staff selected their preferred candidate, and sent the curriculum vitae together with their preference, to the donor. In each case, the donor accepted the SFP staff's recommendation.

Before the evaluation began, the staff met with the evaluator to establish a shared understanding of the terms of reference. The actual evaluation process consisted of a combination of quantitative data analysis, such as student pass rates, and qualitative data collection and analysis, such as interviews with students and staff. The draft report was discussed at a meeting between the staff and evaluator to discuss concerns such as perceived omissions or misrepresentations. The final report was then sent to all stakeholders.

In each case, the evaluation provided helpful recommendations on how to improve the programme. The evaluation at the end of four years was particularly useful, since this marked the end of the period of donor funding, but not the end of the programme. In fact, the scope of this evaluation was extended to include recommendations of how to transform the programme from an externally-funded add-on to the Science Faculty's activities into an integral, sustainable part of its activities. In this case, the evaluator held regular discussions with key stake-holders as his insights and suggestions developed over the period of the evaluation (which was spread out over 6 weeks, though not full-time). The value of such an impartial outsider, provided he or she is sensitive and highly competent, in providing useful insights, observations and suggestions cannot be overestimated.

In the MASTEC project, evaluation has not been as extensive, but some similar principles apply. Members of the project approached a well-known evaluator during the second year of the project and asked her to spend two days working with MASTEC staff in order to draw up an evaluation framework. At the end of two days she had an outline for a framework, which she then worked on further after she left. A revised document was submitted to MASTEC for comment and modification, after which a final project framework document was produced which was submitted to the Project Steering Committee for approval. Because the project is rather complicated, seven different areas for evaluation were identified. The evaluator thus recommended that several different evaluators should each evaluate one or two aspects, and that she should coordinate and synthesise the entire evaluation.

Towards the end of the second year of the project, two aspects of the project were externally evaluated, one by the coordinating evaluator and one by a specialist from the United Kingdom. As with the SFP, the evaluators discussed their findings with members of the staff and made a number of useful recommendations, most of which were later implemented. The programme manager helped to ensure implementation by extracting action points from the evaluators' reports and requesting feedback on actions taken from the relevant MASTEC staff, which was then submitted to the project management team.

In addition, at the end of the second year of the project a tri-partite review was jointly carried out by representatives from the NPDoE and the two main donors. A report was produced, together with recommendations and time-frames for action, which were submitted to the steering committee. These recommendations and time-frames were reviewed at each steering committee meeting after that. Unfortunately, a number of issues were either not addressed or not addressed on time, owing largely to problems of capacity and ownership on the part of the NPDoE.

Discussion

Although both the SFP and MASTEC were conceptualised by local people and by a mixture of people with local and international experience, the processes by which the two programmes were initially conceptualised were very different. Lewin and Stuart (1991) identify six different approaches to innovation, namely, systems, bureaucratic, scientific, problem solving, diffusionist and charismatic. The approach used to innovate the SFP can be described as "scientific", in which "research and evaluation on the needs of learners, the learning process, and curriculum effectiveness are at the centre of the initiation of change." (Lewin 1992, p 76). By contrast, the approach used to conceptualise MASTEC can be classified as charismatic, in which the initiating activity comprises, "strong beliefs, convincingly articulated by those in influential positions…Their motivation comes from conviction rather than research; their goals may not be those of the organisations in which they work but which they may seek to change."

A danger associated with the charismatic approach is that a project's success or failure may depend too heavily on an individual personality. In the case of MASTEC, when the MEC was unexpectedly ousted from office the project suffered greatly. To make matters worse, the head of the NPDoE was also removed from office shortly afterwards. Whilst no one could have foreseen these events, their effects would probably have been less severe if there had been a greater sense of shared vision and commitment to the project at all levels of the NPDoE. In many cases, the project was hampered because of bureaucrats who did not address the needs of the project timeously (or not at all), either because of a lack of understanding of the nature of the project and commitment to it, or because of a lack of capacity to meet the high expectations of the project planners. As Lewin (1992, p 78) points out, whilst, "Many science education projects can be linked to charismatic 'curriculum entrepreneurs' who play key roles, especially in the initiation process," it is also the case that, "Bureaucratic structures are often very powerful in explaining the events that take place during implementation when responsibilities for change move from professional developers to the administrators with day-to-day responsibilities for school systems."

The project goals set for MASTEC were too great to be achieved all at once, particularly given the limited material and human capacity available and the difficulties inherent in the context within which the project operated. A planning strategy such as development planning (Hopkins and MacGilchrist 1998), in which only a limited, achievable set of goals are targeted initially, with a systematic increase in planned goals, could have been very beneficial for the MASTEC project. Moreover, planning should have taken into account the need to develop both teaching and management capacity simultaneously, a strategy that Hopkins and MacGilchrist stress is important in improving school effectiveness. In planning MASTEC, much more thought and attention went into planning the teaching side of the project than the management side needed to support it. Although some of the problems of MASTEC were clearly related to the teaching side, many of the problems that MASTEC experienced could be traced back to inadequate or inappropriate management training, structures and procedures, including inadequate support from the NPDoE. In addition, the planning process did not attempt to phase in various goals in a systematic or realistic way.

In the SFP initially the willingness of most of the science faculty to "own" the programme was limited. In many cases, faculty did not feel that the programme was appropriate for a university, belonging rather to secondary school education. Fortunately, this lack of

ownership initially did not impact negatively on the project, since very little input in time or money was needed from the faculty. However, as the project progressed and could be seen to be succeeding (the quality of students emerging from the programme was high), ownership increased substantially, to the point where after five years the SFP became fully integrated into the Faculty of Science.

The extent to which the NPDoE exercised ownership of the MASTEC project varied enormously over time and also according to particular issues under discussion. Moreover, as pointed out earlier, the degree of monitoring and support emanating from the NPDoE was very limited. Taylor and Vinjevold (1999, p 34) point out the importance of building capacity in provincial Departments of Education if donor-supported programmes are to have a broad impact. They maintain that, "Although the majority of the projects [involving donors and NGOs] involve some or other form of partnership with government, the degree to which they are owned and driven by provincial, regional or district officials is in many cases, open to question. This is not an easy relationship to build. The greater the level of dysfunctionality in any part of the system, the greater is the need for such programmes- but, at the same time, the greater is the difficulty in establishing and maintaining the right balance between government and the outside parties."

Nonetheless, the inability or reluctance on the part of the NPDoE to address various issues that hampered the effective implementation of the MASTEC project did not affect the flow of donor funds. Perhaps greater effectiveness would be promoted if donors and recipients entered into a partnership in which each party had certain obligations to the other one. If one party failed to meet its obligations the other party could then reasonably withdraw from the agreement.

Formative evaluation, both formal (through outside evaluators) and informal (through teacher and student feedback and discussion) was very important in the two projects discussed, highlighting both successes and areas in which development or changes were needed. In some cases, assumptions that formed the basis for planning, particularly with respect to the capacity of students and/or staff, were not valid. This then led to modifications. For example, in the SFP a drawing component was introduced into the programme. In MASTEC, steps were taken to develop staff's time management and curriculum development skills. As Lewin (1992, p 92) points out, "The identification of information needs to improve decision-making as the innovation takes shape. In particular, a tenacious pursuit of antecedent assumptions on which the implementation strategy may depend [should be questioned]. Are they demonstrably sound?" He also points out the need for, "Flexible adaptation to evolving goals as events unfold and the limitations and possibilities of implementation strategies become apparent."

In summary, projects may arise for a variety of reasons, which may lead to different planning processes. Whilst it is obvious that careful planning is desirable, less obvious is the importance of realistically assessing the capacity available for project implementation, particularly the human capacity. Where such capacity is low, capacity-building needs to form an integral part of a project. Moreover, development planning strategies, in which increasingly complex goals are systematically phased in over time, may be a useful strategy in situations in which initial capacity is low. Careful monitoring and regular formative evaluation of projects are valuable sources of information that should lead to continuous project modification.

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