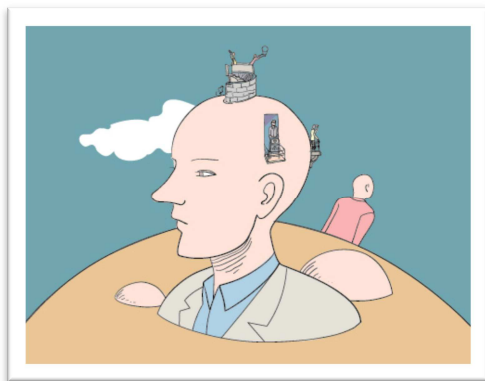


Lessons Learned Mecesusup2 Programme- Academic Innovation Fund IBRD 7317-CH

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Introduction



The Academic Innovation Fund (AIF), previously known as the Competitive Fund, is part of the MECESUP2 Programme of the Higher Education Unit and has been developed under two IBRD Loan Agreements. The first was IBRD 4404-CH (1999-2004) and the second is IBRD 7317-CH (2005-present).

As of December 2009, AIF had conducted a total of nine competitions (1999-2004 and 2006-2008), selecting 770 projects worth over 228 billion Chilean pesos equal to USD 450 million.

The three most recent competitions were conducted within the MECESUP2 Programme framework and resulted in the approval of 346 projects in thirty three institutions for approximately 57 billion Chilean pesos, around USD 110 million.

This article describes some of the lessons learned concerning AIF implementation, illustrating over a decade's experience with particular emphasis on the MECESUP2 Programme.

Competitive Fund as an Instrument

AIF design and implementation have been key to obtaining certain outcomes, and their subsequent impact on institutions and their environment. Some of the Fund's most important features are described below.

Definition of Priorities

All AIF competitions have been conducted with both the Programme and the Ministry of Education (MINEDUC) having a clear definition of their priorities. This has been of utmost importance since the structural problems encountered in the Chilean tertiary education system have been given orientation, focus and special attention. Having the objectives clear, along with important incentives, has sustained a positive attitude among HEI (Higher Education Institutions) with regard to managing change. Equal, transparent and competitive access to these resources has created the necessary trust between all parties involved, making it possible.

Obviously, this opportunity to compete for funding is a way of prioritizing and streamlining the initiatives to be dealt with. It is in this way priorities have been defined and undergraduate academic provision improved – PhD programmes have been created and institutional management has made progress.

It is worth noting some priorities have in fact changed since AIF began. The most obvious and emblematic point to note is related to new work. AIF went from being an important support to large-scale projects in the first stage of MECESUP to a more constrained support dedicated to remodelling spaces within the MECESUP2 framework.

Other changes have involved adjustments or the inclusion of topics which had been given a new focus. For instance, over the past few years providing the conditions to assure student success in their first years of university life via remedial competence-building courses has been an explicit necessity. Also, with regard to undergraduate priorities, the need to support teaching and create teaching-learning units was established.

Moreover, management was seen as a priority following the first competitions. However, the types of projects that have been given priority have been determined according to the progress made by the Chilean institutions and also international learning experiences. The aim of the first projects was to make changes to improve efficiency and finalize databases to dispose of useful basic information for decision-making, for example. Many recent projects are at a more advanced stage – they are conducting institutional research and creating agreements for benchmarking initiatives.

Lessons Learned

The Academic Innovation Fund is a resource allocation instrument for academic innovation and quality improvement in student learning, providing both stability and flexibility. The fact that the main axes of intervention have remained in place for several years has enabled a greater number of HEI to tackle these priorities more widely and deeply. Moreover, flexibility has been decisive for incorporating innovations and making adjustments to priorities in accordance with a reality changing with progress, the experiences acquired and new challenges.

The prioritization and intervention of academic structural problems by MECESUP2 programme and AIF must be positively acknowledged. It has only been possible by means of logical requirements and progressive achievements in institutional improvement. This gradual yet sustained implementation has given time to institutions to assimilate, learn and obtain significant results. Today, the Chilean tertiary education system is ready to face greater changes in management.

Above all, the results achieved in the area of curricular reform indicate that a new phase of interventions may be necessary, in order to integrate exploratory or pilot efforts of change with strategic institutional and national changes.

Selectivity

Being a competitive fund, selecting the best projects in terms of benefits and feasibility has yielded several positive situations. The first bears relation to a more efficient allocation of resources. Only the best projects' criteria are supported according to their benefits and feasibility. A second positive result is that the selectivity in the Fund also implies selectivity in institutions. They know that their projects will be selected in accordance with their quality, so many have begun to consider only selecting proposals that are also worth developing, writing and submitting to each competition. Moreover, given that AIF sets a limit as to how many resources may be requested (corresponding to 18% of total resources to be allocated), institutions of a certain size, with large

capacity for project preparation, are required to prioritize and select proposals internally and strategically before submitting them to the Fund. The number of institutions that perform these internal processes is growing, despite having to select internally, the number of participating institutions in the competition is very high.

As AIF implementation has progressed, an element related to MECESUP Project management history has been introduced, along with another for interproject connections. In addition, the process of impact assessment using specific projects has begun so as to measure impacts as a means of feedback and ongoing development of improvement systems (these impact assessment initiatives are covered in more detail in Section 2. in Undergraduate Support).

All these processes ultimately contribute to developing management practices that can aid institutions in many of its daily responsibilities.

Lessons Learned

The early introduction of AIF resource allocation limits has shown clear signs of geographic selectivity and prioritization of potential beneficiaries. The same effect has been seen with the introduction of specific rules and matching contributions to ensure the viability and good use of resources allocated to projects. More than a decade-long period of implementation has shown that the analysis and prediction of effects and results in the design of competitions is investing in management. In contrast, inaccuracies or omissions that may adversely affect the implementation, and inertial effects, can be slow to amend.

Seal of Rigorousness and Transparency

The rigorousness and transparency with which the competitions have been conducted have contributed immensely to the credibility and seriousness of the Fund, as perceived by the participants.

This way of working should be and is present at different stages of the call for proposals, along with their evaluation and selection. Initially, the terms and rules of each competition are widely disseminated and for all institutions, queries are resolved and help given on request.

The proposal evaluation and selection stage has been managed by AIF based on the rigorous and demanding approval of international and national external academic specialists. This activity has been maintained and improved over time to ensure compliance with defined procedures and the effective selection of the best projects.

The evaluation of proposals has combined remote external evaluation with the participation of *in situ* committees composed of field specialists. The Board of Directors has been in charge of the selection of proposals, which has integrated all available assessment and management information. Their recommendations have enabled the Ministers of Education to facilitate an expedite process for allocating projects and resources. All these participants have made for a very valuable process, which involves technical group and individual perspectives, and also offers a political viewpoint on the initiatives presented.

Furthermore, the involvement of different people who have collaborated in these processes has allowed us to show the work methodology, and learn at the same time.

Finally, a seal on the style of work has also been imprinted on the Project implementation process. The different instances during project monitoring (mentioned

in more detail below) are also an opportunity to keep the rules clear and known to all, and to maintain an interest in achieving good results.

Thus, all institutions know the rules and procedures used for proposal submission and evaluation, selection and subsequent implementation.

Lessons Learned

The different successful competitions and management of proposal evaluation and selection over the course of a decade have shown that the iron will of AIF and its service model, the stability of its managers, the professional and technical quality of all participants involved in the implementation process (providers and beneficiaries) and the learning acquired over time resulted in the creation of an AIF that has earned respect from the academic community and is useful for higher education improvement in Chile. For complex processes of change, such as those undertaken by the Ministry of Education, the MECESUP2Program and AIF, it has been extremely useful to have stable visions, models, methodologies and funding over time. The total amount of lessons learned indicate that the success of an operation of this kind lies in rigorously enforcing the principles of a competitive fund, namely: equality of opportunities regarding access to funding sources, transparency of all calls for proposals, proposal evaluation and selection, and the involvement at each stage of outstanding professionals who have demonstrated irreproachable conduct.

Types of Project Supported

The types of project supported, on the whole, have generated considerable impact on universities and higher education in Chile. The possibility of having innovative development-driven initiatives aimed at supporting undergraduates, supporting teaching, innovating, changing to a student-focused curricula, training academics, improving efficiency indicators, and at the same time, undertaking initiatives that enhance doctoral programmes, and management within the institutions, creates the necessary conditions for institutions to progress as a whole.

Undergraduate Support

The projects to support undergraduate programmes in recent years have led to progress in the modernization of undergraduate academic provision. Many projects in dozens of degree courses throughout the country are making major changes to offer renewed, relevant curricula. Their aim is to provide educational processes for students allowing them to participate actively in their learning, advance in their studies knowing what to expect, to have greater flexibility in making changes along the way, to have opportunities for mobility, to graduate better prepared and to acquire specific and generic life-long skills that will allow them to enter the work market, remain there and contribute to society.

Through MECESUP projects, the benefitting institutions and their academics have been in charge of teaching reform initiatives or have actively participated in training activities and curricula review processes, benefiting from infrastructure improvements and the possibility of working with colleagues from other institutions, both at home and abroad.

The institutions have been able to apply many aspects of their strategic plans linked to undergraduate programmes. Through MECESUP projects, some have implemented changes at an institutional level. Others have implemented initiatives according to their degree programmes, with the support of various projects.

There has also been significant work carried out on some specific areas. For example, projects on remedial competence-building courses have been significant for intervening directly in terms of equity. With the wide coverage and growth of higher education in Chile, the challenge to address academic deficiencies and the mixed abilities of new students has intensified; many of them are the first in their families to attend an HEI. These projects develop tools to reinforce basic skills and critical areas such as mathematics, via induction activities on university life to ensure the success of students in their early years. This means taking charge of this wide coverage and growth without compromising quality.

A few years ago, a means of supporting impact evaluation was implemented so as to maintain a consistent interest in advancing towards results-oriented work and the assessment of outcomes. These projects assess the impact of MECESUP projects awarded to universities.

Among the large institutional networked projects which are of importance for Chile, the Credit Transfer System (SCT-Chile) initiative of all twenty-five CRUCH (Council of Rectors) universities should be mentioned. The aim of this initiative is to improve the legibility of study programmes, raise awareness of student academic workload and promote international and national student mobility. The institutions are making progress in the implementation of SCT-Chile and to this end, have been building more internal capacity through the training of experts, which contributes both to advancing and consolidating curricula innovation processes.

Another networked project, which will have significant impact on Chile, is the Qualifications and Credit Framework that describes the qualifications, the skills associated with each qualification, access mechanisms, associated credits, length of degree courses and mechanisms of progressing from one qualification to another. This project and others have required coordination mechanisms with other programs and ministries.

Lessons Learned

Over the last decade, Chile has resolutely shown its vocation and will to significantly increase higher education opportunities for the secondary school population. This represents a real "revolution" of opportunity for social inclusion and change. This situation has improved equity of access to education but has also increased the challenges of quality: in the first year of admission, the final year and the awarding of degrees and qualifications. MECESUP Programme and AIF are irreplaceable academic and management tools for change in this expansion and its results.

From the beginning in 1999, MECESUP2 Programme and AIF decided on a progressive strategy of interventions and change to allow time to run institutional conceptual research, assimilate knowledge and techniques available worldwide, explore experimental or pilot changes, consolidate associativity between institutions and individuals, and to produce concrete results and useful outcomes.

Time has shown that this initial (bottom-up) approach was the right one for Chile, although system level national results may be interpreted as insufficient in terms of performance, strength and impact (curriculum, duration of degree programmes, teaching efficiency rates, internal inefficiencies, to name a few). The lessons learned, in this case, now suggests a strategy that includes greater strategic intervention (a top down approach) and that has sufficient resources to encourage effective structural

changes to prepare to Chile to face the transition stage towards becoming a developed country with effective knowledge management skills.

Graduate Support

Since its inception, AIF has supported the development of Chilean PhD programmes, which is the main source of advanced human resources and R & D & I capacities. This support has given a significant boost to new doctoral programs and the consolidation of existing programs, based on a growing framework of quality and drive towards results and outcomes.

The way it has supported doctoral programs is unprecedented in Chile. The coherent diversity of types of eligible expenditure on AIF projects supporting PhDs, as a whole, has resulted in the development of effective strategies to improve its appeal and performance, regarding indicators for student selectivity, quality of infrastructure (from space for doctoral students to books and equipment), student dedication to their studies through scholarship support, improving timely graduation, productivity and internationalization through academic visits, as well as visits abroad for students and fellowships for teachers.

PhD fellowships during their thesis have been one of the most remarkable activities. Hundreds of students have been able to attend renowned international institutions, which has enhanced international networking and possibilities of indexed publications, among others.

With regard to graduate support, it is important to mention the project allocation of scientific equipment (in the 2008 Competition) to 7 universities in order to support the development of theses in key scientific areas and the publication of findings in leading journals. Once again, AIF, as a selective instrument of resource allocation, has used (and had to use) flexibility and effectiveness to its advantage given the lack of alternative resources for this purpose. These projects are about to begin; they are not only relevant for the types of instruments to be acquired, but because they strengthen advanced human skills available in Chile. Plans to use the equipment had to be developed, including its organization and management (dependence, maintenance, operating costs), mode of use (training, accessibility, protocols), service providers, and impact indicators (new lines of research pursued). This requirement is a result of lessons learned from other AIF projects involving instrument investments. If not managed properly, the instruments may yield limited results.

Doctoral programs with greater orientation to industries have also been supported. This remains a major challenge.

Generally speaking, the oldest PhDs in Chile are in the natural sciences or engineering, so it is worth noting that the programmes that have had a significant boost in recent years in many institutions are in less developed areas, such as the social sciences and humanities.

Finally, an explicit link with national processes for programme accreditation and with performance indicators has been a key feature for graduate support. For example, PhDs which have received MECESUP funding have been able to apply for new projects provided they have improved their level of accreditation and performance indicators. A favourable outcome has been that virtually all programs that have had the support of a MECESUP project have improved their quality in terms of the level of accreditation obtained.

Lessons Learned

MECESUP Programme support for Chilean PhD programmes has shown that it is possible to obtain highly relevant results to improve academic quality with selective incentives, competitive mechanisms for allocating resources and requirements for improved results. Also, it has shown it is possible to introduce new mechanisms for public accountability which on the one hand demonstrate the proper use of allocated resources and on the other, produce results and outcomes that are close to the original target and those achieved in more developed countries than Chile.

The emphasis on notable outcomes for Chilean PhD programmes, which has generally been demonstrated by many projects supported by the Program, is a lesson learned that should be analyzed and could be considered in other agencies working in higher education, research, technology development and innovation.

A similar conclusion can be drawn from the academic and student (PhD) scholarship resource allocation model used by MECESUP AIF. The emphasis on "institutional resource package" which must yield effective results in terms of academic improvement (enrolment, financial resources for theses, publications and graduation), has proved very effective in improving the quality of programs and their academic productivity. The lesson learned is that, with regard to scholarship support, the emphasis must shift from monitoring materials or inputs (inventory, investment) to the results resources produce, with much higher returns.

Management Support

Projects that have sought to improve institutional management have been of primary importance. Examples include projects that focused on converging databases, optimizing internal administrative processes to improve academic management and student processes, undertaking institutional research initiatives and doing comparative evaluation (benchmarking). This has all had an impact on the work culture in the institutions: there is more information readily available to all (authorities, academics, administrative staff), with greater transparency, inclusion of information in planning processes, budgeting and decision making, monitoring indicators as part of Performance-based Agreements between central and academic units, among others.

In addition, the best management skills in institutions, as a result of AIF MECESUP projects, have even helped improve the conditions for greater success of the Higher Education Information System.

Lessons Learned

Initially, the MECESUP2 program was overly cautious about institutional capacities requirements regarding project and programme management. The implementation of the first projects showed that this variable was critical to obtain relevant results. The first projects to support academic administration had no significant results since their scope was too focused and the strategy unclear. This lesson, which was learned only towards the end of the Mecesusup1 programme (2005), allowed MECESUP2 to refocus support on institutional governance: a strategic approach that sought to enhance results and outcomes of AIF funded projects. A good example of this shift and new focus is the call for projects (and their approval) to create and implement Teaching Management Units and Institutional Research Units, along with the experimental implementation of Performance-based Agreements in Chilean public universities. The first results show how successful this decision was, especially in new management practices, collaborative work and decision-making.

Equity and Quality

Equity has been included in the main objectives of Loan Agreement 7317-CH and has been a concern of the AIF-MECESUP.

Equity has been studied from the points of view of various fields. A first aspect is that the 18% limit, mentioned earlier, can protect the capacity of smaller institutions when it comes to awarding projects.

The notable outcomes of regional institutions have also contributed to greater equity. Since 1999, around 70% of the resources and number of projects have been allocated to institutions of regions.

As for the areas which benefited, although the basic sciences and engineering have excelled in their ability to be awarded projects, the support received by the areas of education, arts and humanities is remarkable.

Having implemented projects from Arica to Magallanes, there has been an improvement in the quality of education for students throughout the country. In some areas, improvement of the infrastructure, access to technology, information, innovations in academic provision and student benefits in general has been remarkable. This is a significant step towards improving equity in access to a quality higher education in Chile.

Scholarships for students and academics, allocated through these projects, have also contributed to greater equity.

In terms of quality, it has been a permanent issue on a variety of levels.

Proximity to the accreditation process has been essential: from projects supporting PhDs (see above) to pedagogy projects specifically designed to take charge of the poor results in accreditation processes.

AIF also requires projects to be linked, more and more closely, to strategic planning and institutional educational models. True institutional projects in this sense have shown more significant results.

Moreover, concerns, reviews, feedback and permanent signs from AIF and MECESUP2 Programme to the institutions, regarding the quality of the activities in the projects, have helped to improve institutional understanding about what results-based management and public accountability are.

Lessons Learned

Limiting the maximum amount allocated for MECESUP-AIF resources has proven to be a powerful technique for targeting budgets to achieve some important social and educational public goals regarding equity. It has shown that in the design of competitive funding instruments, the following should be carefully considered as part of the expected outcomes: the public policies in force and the potential effect of specific boundary conditions, (such as relative development in regions, academic inventories, and scientific and technological production).

Project Implementation

Implementation Monitoring and Evaluation (M&E)

The work of project M&E has always been essential and therefore is conducted both periodically and continuously. Since its inception, the Fund has supported project implementation, overseeing it is carried out in the best possible manner, solving problems that arise along the way, providing guidance and demanding results at the same time.

The projects employ several strategies. One relates to field visits. In-situ meetings provide a unique opportunity to learn of the project progress and challenges, along with the people in charge, the places they work and a number of other important context-related aspects to truly know how projects are developing, and if necessary, when to intervene to achieve better results. It is also important to highlight post-project activities; the impacts of the projects, their continuity and dissemination over time may be deduced, and the senior authorities may link the outcomes achieved in the short-term to the Institutional Development Plan.

While these strategies are outlined in the Rules and Regulations of the competitions and the agreements signed by institutions with the Ministry of Education, thus of a compulsory nature for the institutions, the progress made has been remarkable in terms of responsiveness and quality with which these activities may be performed.

This project monitoring has made outcome-oriented public accountability more of an everyday occurrence for institutions. Establishing indicators in projects in order to have a target which is worked towards and to gauge progress along the way has also been crucial.

An additional strategy employed more frequently in recent years is the organisation of seminars and workshops alongside the projects. These are highly valued and are extremely beneficial.

Lessons Learned

The initial implementation of projects awarded via AIF-MECESUP brought to light the existence of some institutional practices, rooted in the institutional culture of Chilean higher education management and in new World Bank requirements for procurement processes, which were not always favourable to a timely implementation within the times agreed on in the contracts. As a consequence, a chain reaction of requests and implementation extension deadlines were granted. To that end, as a result of this learning experience, it was decided that a new M&E mechanism would be introduced (in the MECESUP2 programme): mid-term evaluations. MTE evaluate project implementation progress, as well as activity term viability and commitments under the agreed deadlines. If unviable, implementation and/or PBA adjustments are agreed on. As an experience, this instrument has facilitated the analysis of project development in greater detail, has provided institutions with more formal feedback and has corrected problems in a timely manner.

Professional AIF-MECESUP2 relationship and in Institutions

The link between AIF-MECESUP analysts and institution officials is fundamental in M&E project work. In the case of AIF, the officials are in charge of managing projects in all its phases or stages, namely: the coordination of external proposal evaluation, reformulation of approved projects, feedback for rejected proposals, and permanent monitoring of projects in their implementation stage and post-project stage (or impact monitoring).

The diversity of professionals who are gathered together by one main interest and their commitment to Chilean tertiary education is recognized as a positive aspect. The professional vision of AIF, from various areas and previous experiences, fosters a greater understanding of the problems faced by institutions. Another important aspect is how the work is organised, with analysts in charge of a portfolio of institutions and their projects, alternate analysts who are more focused on teamwork, as well as regular meetings of the whole professional team to share information on their circumstances and build consensus.

As far as the institutions are concerned, it has become increasingly clear that institutional management and governance are necessary for project success. In this

regard, the participation of Academic Pro Vice-Chancellors, and the Vice-Chancellors in some cases, is essential. This management, along with proactive academic teams which have leadership and management skills, and an administrative team, truly make a difference, compared to when these teams are not part of management.

Lessons Learned

MECESUP Programme project implementation has often shown a certain degree of inconsistency between commitments (institutional focus) and the reality of implementation (project focus). The evidence suggests a loss of institutional control over some projects, as well as inadequate management control over some initiatives. A timely correction of these inconveniences has led to AIF-MECESUP2 being able to agree on better working relationships with project managers and a closer relationship with senior management to achieve better management results. In short, it is the people (managers, academics, professionals, students) that make successful project implementation possible; additional effort is required for its effective integration and coordination.

Networking has Reaped Great Benefits and Presented Great Challenges

There are many networked projects that stand out: some PhDs, undergraduate programmes and some in the field of management.

They have strengthened relations between colleagues from different institutions, and have fostered the sharing of experiences and ways of tackling common challenges. And if it were not for this way of working, achieving these results and impacts would not have been possible. To name a few examples: SCT-Chile system, the Qualifications and Credit Framework and the networks of institutional research, among others.

Lessons Learned

Evidence of implementation shows that some partner projects and networks have been formed for instrumental purposes, with no real common purposes and no pre-existing, trustworthy equipment or previous teamwork experience. This has hindered the progress of projects and efforts of its members. Thus, the proposed partnerships require additional effort with regard to the rigorousness of evaluations, as well as a demanding and thorough M&E of actions and results.

Challenges

Administrative Aspects

While it is supposed that the benefiting institutions are minimally organised and have professionals at their disposal to support management in administrative aspects (through ICUs, Institutional Coordination Units), the administrative burden of the projects represents a challenge. The procurement requirements and revisions from IBRD, local agencies (Public Market) and within the same institutions, along with increasing audits by the Comptroller General's Office, means administrative tasks when implementing a project are of great importance. Unfortunately, not all institutions have ICUs with professional, stable capacities available, which tends to impede an efficient implementation.

Lessons Learned

Many procedures, accounts and reports have to be prepared during a project. Most are necessary and very important. However, it should be possible to simplify processes and notify of requirements and rules in advance, to avoid an over-emphasis on procedures and reports. And above all, focusing on improving the institutional capacities of ICUs should be a priority. Successful project implementation and good

use of the resources depend on the ability to join forces and to support administrative processes as needed. AIF has found that when this institutional role is fulfilled correctly, better project outcomes are achieved.

Project Management

In general, institutional changes in recent years have been remarkable; however, some institutions still face serious challenges in project management. More ambitious and strategic governmental challenges will require enhanced institutional management skills.

Other Aspects

The organisation of AIF-MECESUP2 under an IBRD project has reaped several benefits. On the one hand, the commitments made force objectives to be met and secondly, the external, permanent and international perspective helps improve the process as the project moves along. Similarly, IBRD visits to the institutions to become familiarised with sub-projects are seen as an instance to show what is being done, receive input and raise concerns directly.

Other external perspectives are very important to make comparisons with other international experiences, confirm what is being done well and what needs to be improved in the Chilean tertiary education system. In that sense, the International External Advisory Board is valued as the body in charge of reviewing the state of Chilean tertiary education on behalf of OECD and the World Bank.

Fund sub-projects, together with the external perspectives for the institutions and AIF-MECESUP, have eventually become a source of learning. In all these years, a great deal has been learned by the people involved in the projects: the university authorities, management teams, institutions and organizations. Also, in the AIF-MECESUP2 the same has happened, allowing everyone to continue to improve in the future.