



Directorate for Education

Centre for Educational Research and Innovation (CERI), OECD

Innovative Learning Environments (ILE)

INVENTORY CASE STUDY

Instituto Agrícola Pascual Baburizza

Chile

An agricultural VET high-school primarily comprising students from rural areas and disadvantaged economic backgrounds. It aims to provide learners with a cross-disciplinary balance of general education subjects (math, languages, science) with agricultural subjects (horticulture, watering and cattle management), as well as hands-on work on sustainable agricultural practices. A strong emphasis is also placed on learning 'soft skills' such as sense of command, initiative and honesty. Learning is facilitated by teachers who also act as personalized mentors by providing guidance and support for groups of ten students. National evaluations reveal that language and mathematics scores have steadily improved, and improvements have been observed in graduation rates as well.

This Innovative Learning Environment case study has been prepared specifically for the OECD/ILE project. Research has been undertaken by Office of International Relations under the supervision of Eliana Chamizo from the Ministry of Education (MINEDUC), following the research guidelines of the ILE project.

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INNOVATIVE LEARNING ENVIRONMENTS PROJECT

CERI – OECD

CHILE CASE STUDY

INSTITUTO AGRÍCOLA PASCUAL BABURIZZA, IAPB

A. ILE objectives, the nature of the innovation, including the details relevant for the socioeconomic context and the served population. The approach the ILE has, age of the students and the general situation of the educational system.

ILE objectives

The Instituto Agrícola Pascual Baburizza (IAPB) is a high school technical institution that provides vocational and technical education leading to the degree of Agricultural Technician at medium level. Currently it has around 380 students, distributed between boys and girls.

IAPB is a private subsidized school, where the central government budget pays for the larger amount of students' tuition. Parents assume the rest of the costs and contribute with a part of school expenses. When the familiar situation is economically deprived and the house income is low, and hence students need support from the school, IAPB gives scholarships which can be used to have access to board school and for student's school feeding. About this, Luksic Foundation has an extremely important role because they complement and provide financing for the support for students and provide scholarships to many of them.

ORIGINS OF IAPB

The Croatian immigrant *Pascual Baburizza Soletic* indicated on his will the amount of money and financial resources to be used on the construction and maintenance of the high school, giving

specific instructions that the school should deliver technical education for Chilean young students. The first students who entered the school did it in year 1945.

Between 1941 and 1990 the school was administered by *Pascual Baburizza Foundation*. In the seventies, the school had an important crisis derived from economic problems. From 1990 *Mr. Andrónico Luksic Abaroa*, founder of a family of Croatian immigrants who made his fortune in Chile, started to administer IAPB.

Andrónico Luksic Foundation is a nonprofit private corporation that has the objective of giving opportunities to students from poor families in Chile. This institution gives all kind of first level and high quality resources to the high school: human, material and technological. Over the years they have collaborated closely to revitalize IAP, providing it with infrastructure, equipment and fresh resources for programs to get out of the economic crisis where it was immersed.

This foundation has been in charge of the institute since 1990 and from year 1994 IAPB has been academically supervised by the *Educational Corporation of the National Society of Agriculture, SNA, CODESSER*. This foundation has a considerable experience on the development of educational projects on technical and vocational education and in the agricultural area.

ILE NATURE

GENERAL SITUATION OF THE CHILEAN EDUCATIONAL SYSTEM

The Chilean educational system has a structure of 8 years of elementary mandatory education for students aged between 6 and 13 years old, followed by 4 years of secondary education, also mandatory since year 2003, for students aged between 14 and 17 years old.

Secondary education or high school education is organized in four years. The first two are years of general education and the last two are organized in two different career tracks. On one hand there is the scientific humanistic path (that gives training mainly to access to higher education) and the Technical and Vocational Education (that gives education and training to access to the job market, in areas like Administration, Services, Agriculture, Industry and Commerce).

Finally, the preschool system in Chile provides education and care for children up to 5 years old provided by a variety of private and public institutions. It is not mandatory yet and its coverage is still low. Currently there are a number of reforms put into place to increase coverage and quality of preschool education, so is possible to “*level the field*” (very important factor in an unequal society like the Chilean society is) for all children born in Chile.

School administrative categories:

In Chile there are four types of categories of school institutions:

Municipal schools: Administered by 341 municipalities along the country, through one of the following systems:

- Municipal departments for the Administration of education (DAEM), which are 288 and respond directly to the municipal authority (Mayor or Mayoress)
- Municipal Corporations, which are 53 and have strict rules with respect to the hiring of personnel and the use of resources

Private subsidized schools: Financed by a subsidy or a public voucher given by the central government based on student’s attendance. The difference is covered by student’s parents or guardian.

Private paid schools: They don’t receive any subsidy from the central government and operate completely with parents’ contributions.

Corporations: They are technical high schools administered by firm corporations with public financing specially settled with this purpose (which it is not a per student subsidy).

Technical education is a field at Chilean education that still needs large development and improvement in order to reach real and measurable goals. All the efforts that can be performed around the strengthening of technical education are welcome and they should guarantee that students have access to more and better resources.

Chile is a very unequal country and as such the educational system and the school have to compensate the huge disparity that exists between social groups in terms of income and academic performance. IAPB tries to develop abilities at students that will be useful for them in order to have better jobs and improve their lives in the future. This process has been integrated in the academic curriculum so it can be really effective and students get to understand the approach and goals that this kind of educational system has.

SOCIOECONOMIC CONTEXT OF THE ILE

IAPB is geographically located in the commune of *Calle Larga*, at Los Andes province in Valparaiso region. It is located at *Hacienda San Vicente (San Vicente Estate)*, which is property of the Luksic family. As said already, the contribution this family gives to the education and training that students receive at this technical high school is crucial when we evaluate the accomplishments IAPB has reached.

The commune's surface is about 322 km², and the population is about 10.935 inhabitants, divided similarly between men and women. Half of the population is defined as rural population being the other half is urban population.

The most important economic activity of the commune is agriculture, is centered on the production of nectarines and table grapes, with are all for export.

The majority of educational institutions around the area provide elementary education and only two institutions, IAPB and the Polytechnic high school Pedro Aguirre Cerda, from the same commune of Calle Larga, provide vocational and technical education. The second one opened new careers only in 2011: Mining and electricity.

In Los Andes province there is a large need for improvement of education and training and for the upgrading of educational outcomes for technical education. Also, important problems related to alcoholism and drug abuse have been detected. There is a very high unemployment rate among young population and finding a job is not always an easy task. Many of those young

people who graduate from high school barely have the qualifications and necessary skills to perform at the job market.

- B. The ILE model and the learning environment characteristic: how students are organized, how they work with teachers and facilitators, how is knowledge and content combined, pedagogy and sequence of learning, use of facilities and the space and the use of community resources.**

ILE MODEL

This secondary education institution delivers technical professional education and aims to reinforce learning through cross curricular students learning.

IAPB's mission is defined to become "A Center of pedagogical excellence that provides education, training and personal improvement to young people with agricultural vocation, in a healthy environment, with first level human, material and technological resources. The Foundation supports and provides conditions within the high school so when a student studies hard and performs well, he doesn't need to drop out because of economic problems".¹

The main idea of this institution is to benefit all students who want to pursue on their studies to be able to do so, even under adverse economic conditions. Each student receives support to project his/her career as an Agricultural Technician, entrepreneur and university level professional.

This Institute has been recognized as a high school of excellence where the work on mathematics, language and science is stressed but is also combined with classes of horticulture, watering and cattle management. All students who graduate from this high school receive the degree of technicians.

¹ Official documents provided by the Principal of the School.

The mission of IAPB can be summarized as: shape autonomous and responsible people, deliver agricultural education of excellence, educate in a real productive context and guarantee best and higher opportunities for their graduates.

LEARNING ENVIRONMENT CHARACTERISTICS

IABP is an *innovative learning environment* given that “it has a learning model centered on students, a model that happens in a physical environment, with spacious classrooms, where the teachers own their classroom. Teachers also have all the materials they need to work, in a working scheme where students don’t have to wear a conventional uniform, and where the really big classroom is the countryside and where “*learning by doing*” is very important. “We don’t leave aside the promotion of values, we work with respect and we do not provide only instruction but really education. The dining room is also a space for learning; they have lunch using a tablecloth, a plate, silverware, a napkin and this is also a way of educating them. At the board school all students have their own locker, a well-made bed which they have to properly make themselves, are also learning environments. I think large spaces help us enormously and also the fact that we are on an open and relaxed environment”.²

Another important element at IAPB is teamwork and the collaboration that exists among different actors who work together at the high school. “There is teamwork, when we have to play a melody we are all there, and one of the strengths is to be able to sit on the table, talk to each other and say when you don’t agree with something and give the reasons why this is the case”.³

Leadership is *distributed* among different actors inside this educational institution. For example in the general direction of IAPB the role of the school principal is recognized; at the school the leader is the Head of the Academic Department, but in the countryside the leader is the Head of Production. The different working areas determine the different types of leaderships.

² Interview with the Head of the Academic Department from IAPB

³ Interview with the psychologist of IABP

“At direction, it is Humberto and we are in charge of production, teaching and administration and the sum of us two becomes the Institute. What I do in the countryside is mixed with the pedagogical theme; I combine it with the person in charge of internships. For example, she gets the request of pruning and she lets us know which courses will be doing that and I teach them the technique to be used when pruning”.⁴

These different leaderships have made possible to define clear objectives and responsibilities and also to monitor performance.

Other important element inside this proposed model has been the proactivity from teachers and among all the staff who works at the institution. It is necessary that all individuals put their activities to the service of the general work of the institute, so it is better articulated. “We have freedom to make our own classes, especially those who are from the technical area, we prepare our own textbooks, our own classes and for that we have total autonomy and we are able to bring our students outside, to firms and enterprises for example”.⁵

The institute seems innovative at the “working methodology, all teachers here are applying many different methodologies, going to work on the field, using a laboratory where students can learn in many different ways, and that is something I have not seen in other schools. In other schools, the classes always have the teacher in front of the class, children realize this and they see how we try to bring them new activities and how we are always inventing new things for them”.⁶

THE PRINCIPAL OF IABP

At all the interviews with staff involved at IABP there were mentions to the role of the school Principal, Mr. Humberto Lepe. For the IABP Advisory Council he is a real *treasure* as a Principal. In general, they say he is a “person who is able to listen to others, who has led the Institute very high. He knows exactly which his problem is and for the solution he counts with us, with the

⁴ Interview with the Head of the Academic Department at IABP

⁵ Interview with the teachers at IABP

⁶ Op. Cit.

Foundation and with teachers. This generates moments of union that are very effective and important".⁷

One aspect that is shared by teachers and principals of the institute is that at IAPB there is **management model** that has been developed along with the educational model. The Principal is in charge of this management model, as if it was any other firm or company. There is the demand of being productive and to perform the best they can at IAPB. To be able to do this, the principal has had to develop coordination abilities between different areas, so everyone knows which are the routes and the objectives the institute is pursuing, which are the established goals and what is expected from each of the professionals at IAPB. Coordination is developed through weekly meetings with teachers, with administrators and between different working areas of the institute.

The work of the Principal is recognized as a very important one for everyone at the school and they value the capacity of the Principal to manage, face problems directly, being executive, objective and impartial.

IAPB ORGANIZATION

The institute is organized according to a scheme which is directed by the principal and under him there are three well defined areas:

Pedagogical Area:

- General instruction area
- Technical instruction area (Inside this group, technical instruction is in charge of coordinating the work of students in the field, along with the production area through the coordination of internships)
- Inspectorate
- External affairs (in charge of developing the follow up of graduated students)

⁷ Interview with IAPB Advisory Council

Productive area: Storage, Workshops and Technicians on the field

Administrative area: Maintenance, administration and kitchen

STUDENTS AT IAPB

IAPB serves students from Seventh to Twelfth grade, who are specialized in Technical Education in order to become Technicians in Agriculture.

The majority of students come from rural families with low socioeconomic status, many of them from the North and Central regions of Chile.

Due to the above, and as we establish at the introduction, there is an important number of scholarships available at IAPB:

AVAILABLE SCHOLARSHIPS AT IAPB:

Given the socioeconomic characteristics of students at IAPB there are different aids for them:

- Scholarships for Board school and food (Ministry of Education)
- Food scholarships (IAPB, Andrónico Luksic Foundation)
- Tuition Scholarships (IAPB)
- Academic performance (Andrónico Luksic Foundation)
- Social Scholarships (Andrónico Luksic Foundation)
- Foundation Scholarship (Andrónico Luksic Foundation)
- Scholarship Choapa Valley (Los Pelambres Mine)
- Higher education studies (Andrónico Luksic Foundation)

Many students were motivated to enter this institute by former students of IAPB. They consider that is highly significant that there is teamwork where everyone knows each other and understand what is expected from them as students. Also, many of the graduates are now immersed at the job market and have been able to realize the benefits they have got from the

Institute. They have been able to changes their lives and to have the chance of having a better life is really motivating for all these students and their families.

Teachers describe an average student from IAPB as “a student whom you can work with, it is a respectful student and someone you can manage. When they arrive in ninth grade they don’t have many study habits, so it is difficult to level them, from tenth grade up they change though, they become respectful students, who want to study, are obedient, and you give them an instruction and they obey you”.⁸

It is recognized by all that many of them arrive to the institute with some emotional weaknesses. The Institute has been able to adapt a special working method where is possible to have some certainty they will have suitable guidance and support. Each teacher is in charge of 10 students and uses a personalized *tutoring method*. There is a psychologist who acts as a counselor, he teaches two workshops every week with 11th and 12th grade and other teachers also develop the same workshop with levels 9th and 10th.

Tutors are teachers who accompany students, are closer to them and there are three of them in all the school. However tutoring is a mission that all teachers share. For IAPB is important that students graduate with the necessary technical skills, but also with deep *values* like discipline, initiative and honesty. These “soft skills” are extremely important when students go out to the job market. To have these skills can really make the difference between two graduates when they are applying for a position.

School Uniform:

One interesting innovation that happens at IAP is the school uniform and the fact that the directing team decided to change the rigidity of the uniforms that students were wearing. Given the nature of what they study, today the uniform are jeans, a t-shirt and when they are on the field they wear a raincoat and other safety implements like boots, anoraks, goggles, sun blocking, etc. When doing this the idea is they recognize and get deeper understanding of the

⁸ Interview with teachers from IAPB

work they will be doing in the future, under the idea of *BPA: Buenas Prácticas Agrícolas: Good Agricultural Practices*. This is called “*learning during the workflow*” and they declare it is the definition of what they practice every day at IAPB.

TEACHERS AT IAPB

The group of teachers is formed by about 20 young teachers and the majority of them are men. In general is a young group, enthusiastic and they all the time they show a high sense of cohesion and joint work. From the total of teachers, only half of them have received training to become teachers at a university. The other half come from different professions and jobs. This could have been seen as a weakness for the school but has actually being transformed into a strength, since the institution has invested on the training of their teachers, so they can get all the knowledge they did not get as university students. For example, every Friday afternoon all teachers have a mandatory training session which is part of their schedule at IAPB. They are used to stay longer on Friday and understand this is part of their duties and responsibilities as teachers at the school. They also know that the majority of teachers in the country have winter vacations in the month of July. It is not the case for them and they have to work during that time and the institute gives courses and special training to assist them at their work as teachers. They have had so far educational workshops, evaluation courses, planning courses and other subjects where they expressed to the administration they felt less prepared.

At the interviews teachers expressed that talking about “pedagogical stuff” is very important for them and they value very much the workshops with pedagogical reflection. At the Friday meetings for example they have special activities: “Once a month a teacher presents a methodological or an evaluation experience to the rest of the teachers, uploads it to internet and sends it to every teacher by email. We all make comments, positive suggestions and some recommendations. Then the teacher collects all the information and shows it to the group. We see then positive aspects, strengths, weaknesses, etc. We do this one a month and the next Friday we are dedicated to analyze administrative aspects, for example tutors give us their

experience, they tell us about students with low results, we work giving feedback to each other, we provide advice about students who need more support and attention from us”.⁹

When the administration has to select a new teacher one very important aspect to consider is the degree of commitment the candidate has. This is tested by an open dialogue with the applicant teacher. For the Head of the Academic Department is essential candidates are good teachers, but also that they are committed with the academic achievement of children. Current and new teachers have to assume the duty of educating with a strong sense of understanding that it is their direct responsibility. “If a teacher says that it is not his fault that students don’t learn, we know he is not good for us. We are the main responsible for the learning of children inside the classroom”.¹⁰

IAPB teachers show at every moment a large degree of commitment and feel accountable for children’s learning. They declare they know they are working with a very specific group of students, whom they have to know very well and have to help them reach good educational results. “We have a compromise with results, **these children** are the ones we have to educate, they are the ones we received here, on these conditions, they have to advance and it is no excuse their parents are poor or have not finished their schooling”.¹¹ It is necessary that teachers have high expectations for their students and that they feel deep inside them students are able to learn.

At every moment teachers show a strong pedagogical vocation, important aspect to mention given that many of them are not trained as teachers and have studied different careers, like biology or agronomy. For many of them this combination has been fundamental and has given them important tools to **apply** their knowledge.

The role of the Head of the Academic Department has been transformed in a very important pillar for the work of teachers. He is the one who gives more attention to students, is in charge

⁹ Focus group with teachers from IAPB

¹⁰ Interview with the Head of the Academic Department from IAPB

¹¹ Op. cit.

of motivating teachers daily at their tasks and he is the one who receives student`s parents when a special situation comes up and needs to be immediately solved.

He is in charge of giving support to the academic planning of all teachers. "All this is accompanied by supervision and support in the classroom, so I go to watch classes and talk to teachers, first about the strengths the class has and then those aspects that can be methodologically improved. And I respect each teacher`s expertise since I am not an expert on every subject. I am convinced that education is the only tool that our young people have to get *social mobility*, and this is a concept I need my teachers to understand. Learning that my children can get in the classroom, at the field, will be fundamental to get this social mobility".¹²

When asking teachers how they see themselves, they respond they feel they are resilient, responsible, with a strong capacity to adapt to change and more importantly, as a team.

Open Classrooms:

"We also work here with an open doors system, which is something very unique for high schools in Chile and we see how the Head of the Academic Department is supporting us during our lessons".¹³

Watching and visiting classrooms by the Head of the Academic Department is a common practice at IAPB. Teachers are used to have these visits to their classes and to be watched so he can give them later feedback, either positive or negative. In general, he criticizes the general dynamics of the class. In general they all realize that making a good class should not be a complex task for teachers. They should be aware the class needs to have a start, a development and an ending and those stages of the class have to be respected, so it becomes an effective class.

Teachers must also let students know which the objective of the class is. At the ending of the class they must ask students what they have learned, through formative questions to the group.

¹² Interview with the Head of the Academic Department, IAPB

¹³ Interview with teachers from IAPB

By doing this teachers can identify those aspects that have to be reinforced when starting the next class with the student group.

All teachers and even the Principal are responsible for teaching a course. This makes them keep in touch with students and be updated on the methodologies they have to use in the classroom. This also helps them in the opinions they can deliver when they evaluate the work that the other teachers are doing with the students.

The following is the curriculum that is developed with IAPB students for year 2010:

Subject	Hours in classroom	Total of hours
Biology 9 th – 10 th /Chemistry 9 th – 10 th /Tutoring 9 th – 10 th	33	44
Language and Communication 9 th and 10 th grade	36	44
Language and Communication 11 th and 12 th	10	14
Mathematics 9 th – 10 th	36	44
Mathematics 11 th – 12 th /Physics 9 th – 10 th	22	30
Religion 9 th – 12 th / Tutoring 11 th – 12 th /Counseling	24	44
History 9 th – 12 th / DHP 9 th – 10 th / Tutoring 9 th	29	44

English 9 th – 12 th	26	32
Physical Education	12	16
Music	6	6
Arts	6	6
Total hours in General Training	240	324
Agronomy 9 th		
Agronomy 1	36	44
Agronomy 2	36	44
Agronomy 3	36	44
Agronomy 4	14	22
Agronomy 5	8	8
Agronomy 6	8	8
Agricultural Engineering	30	30
Agricultural Technician	16	16
Veterinary 1	17	22
Veterinary 2	9	44
Total hours of differentiated training	210	282
Total for 10 courses	450	606

PEDAGOGY AND SEQUENCING OF LEARNING: THE IMPORTANCE OF LEARNING BY DOING AND PRODUCING

One of the principles of this institute is “*learning by doing and producing*”. To the person in charge of the internships this must be done in real context, as a tool to train people and

professionals. By doing this, students get used to respond to employers' demands and it is expected they will continue perfecting themselves and this exercise will be repeated during their professional lives.

The basis for internships is every content that students learn at their classes has a practical application. The person in charge of internships has to make sure that all the technical courses have hours of field work. The first two years are half days and the last two students have full days of practice. All of this is done at the countryside, the "*big classroom*".

"We have the policy of learning by doing and producing, but here we don't have the policy of learning by using their mistakes or setbacks. The idea is that when they go to the field they do things right, because there is a responsibility behind. It is a responsibility with respect to productivity on the field; because with the money we make from there we will improve lunch, for example. We will be able to do many things on our same benefit and this will also contribute to improve the prestige we already have ... ¹⁴

There are three different sets of agricultural practices: fruits, gardening and horticulture. Students rotate among different groups during the year so they can complement their knowledge and expertise.

The course "*good agricultural practices*" is part of the curriculum and the idea behind is to make students work properly and being friendly with the environment. IAPB is part of a network of schools belonging to the National Society of Agriculture, SNA ¹⁵ which gives them opportunities to do internships in real contexts and situations. The essential factor here is that they are trying to respond to the productive sector needs. The group of teachers is not the only one that decides and determines which the skills that students need are, but it is also very important to consider reality so they can guarantee future work opportunities for students.

The coordination between the internships coordinator and the teacher's team is essential for example when establishing the schedule for work on the field for each technical course. People

¹⁴ Interview with the head of internships, IAPB

¹⁵ www.sna.cl

in charge of internships work articulated with the principal, with people in charge of production and with the teacher's team.

The idea is to build strong links between the school and the job market. All the contents that are taught are adjusted to the abilities and skills they need for the job and they train students properly, so they can develop abilities which they can use in the future. IAPB has been able to react quickly enough to the changes and graduates have been able to adapt to new situations. They are respected and have got jobs very quickly once they graduate.

FIELDWORK:

This issue is crossed by the goal of providing students with real life experiences and the need of showing students there is trust on them. "There is a slow advance from 9th to 12th grade and it is very clear to see a student when he starts and to see how they graduate from 12th grade. By the end of their schooling they reach a degree of maturity and autonomy, which is very high with respect to their peers who graduate from regular high schools. It is possible to assign them with tasks and responsibilities. Young people are always asking adults to trust them, but we have to give them room to show us we can do so, and that is not a question of only saying it, we cannot say what trust is, but we have to give them actual responsibilities, because we really know they are able to complete them. To reinforce this trust we need to have a very structured program of monitoring and start working with them from 10th grade".¹⁶

The different tasks are distributed along with the courses that the students have at IAPB. "In 10th grade the students go to the stables, to help people in charge of horses at the estate, they are under the supervision of the person who works with the horses, and also under the supervision of people in charge of machinery who works directly with the general supervisor".¹⁷

In 10th grade they are able to do a number of different things and there is always an adult who supervises them. Students have that assignment twice a year ... they have to stay over the weekend and they are called "*monitor week*", they wear a red jacket that has their names on it.

¹⁶ Interview with the responsible of internships, IAPB

¹⁷ Op.cit.

That week they don't go to regular classes and it is the time when they are actually working and are considered as professionals.

The philosophy under all this is that teachers are who have to obtain learning with teenager students, giving them equal opportunities, not excluding anyone. "There is the watering monitor, the general monitor, the estate monitor, who is on top of the hierarchy. We have a strategic alliance with the owners of the Estate, and they are able to work there for a week and are in charge of a group of actual workers. When they have that responsibility they feel like adults".¹⁸

This innovation is particularly evident when we refer to field work. Teachers give real responsibilities to students, which seem to be an easy task, "but when you lend a tractor that is worth 10 million (around 20.000 dollars) and you teach him how to drive it, and they do it themselves, that is an innovation. We treat them like young adults, not like teenagers".¹⁹

ADVISORY COUNCIL

One of the important groups that has a counselling and support role is IAPB's Advisory Council. It is a group of local business men and managers related to the world of agriculture, who have a strong link with the institute and who have put their efforts in suggesting ways of connecting what is taught at IAPB to the real need of the agricultural world.

For the counsellors is important that at IAPB community development is a significant element, for the region and for the area where the Institute is located. This makes possible the existence of common interests among the high school community. For them this is the only way to advance on the development of the country.

Counsellors indicated also that they consider that graduates from IAPB, whom people call "*pascualinos*" are highly valued at the job market because of their training and their professional and human values.

¹⁸ Interview with the supervisor of internships at IAPB

¹⁹ Op. cit.

USO OF SPACE AND FACILITIES

One important aspect of the organization of different spaces inside IAPB is that each teacher has its own classroom where he receives different group of students for their lessons, according to their schedule. This aspect is highly appreciated by teachers and it is actually an aspiration many teachers have in Chile. At IAPB this change started about ten years ago and has had a strong acceptance from teachers, because allows them to have their own materials, arrange the rooms their own way and plan their activities. They get to have students immersed into the taught subject and in the classroom.

Teachers value to have their own room, to have a room/office, with their materials and to be able to organize their time according to their needs. Each teacher arranges the breaks and pauses during the class, according to what is planned. The only bell that rings in the school is in the morning at the beginning of the day and there is no other ring during the school day.

Other aspect where there has been innovation is at children school feeding. Many students point directly *“here the best is lunch”*. And the school tries to give dignity to lunch by giving them a good and complete meal. They don't use a tray like in regular schools, but napkins, plates and silverware. This is done because students are considered future professionals and not only students. They are taught manners, how to eat, how to behave themselves on the table and they reward the expression of values like courtesy and good behaviour.

Also there is special concern about cleaning and housekeeping. For those who manage the school, cleaning of facilities is an important factor. Everyone notices that the school is always clean, rooms are wiped and the school yards are free of trash.

IAPB's facilities are first level and they are above the country average. This has been a factor the school has taken advantage of because it has allowed students to put into practice what they have learned on the same field, which is next to the school. Students even have tools and first level technology to learn to use machinery on the farms.

C. - Nature and quality of the learning developed at the ILE, at the classrooms, laboratories, workshops and other non-formal spaces.

NATURE AND QUALITY OF LEARNING

The principle that holds the work of IAPB is to become “A school that works with learning centered methodology, where learning by doing and producing in real contexts is the tool to form people-professionals. A service of total quality oriented to form people who learn to learn and to be entrepreneurs, where the institutional, curricular and academic action is managed with total autonomy”.²⁰

IAPB has been concerned about improving his work and during the last years the emphasis has been on the following issues:

1. Institutional management: IAPB has moved from being an educational organization to a service Enterprise; from a traditional school to an effective school
2. Curricular management: IAPB has moved from a subject-based curriculum to a curriculum based on competencies.
 - Leading and management that encourages the academic team to design, implement, evaluated and provide sustainability to the curricular proposal.
 - It is linked with two processes: the curricular development and the application in the classroom, the adaptation of plans and programs and how knowledge is built into the classroom.
 - Promotion of an education of quality

Model centered in the student and the learning achievement

3. Teaching management: From a traditional to a professional teaching

Roles and responsibilities of the teacher:

- Guide and facilitate learning and the knowledge construction

²⁰ Interview with person in charge of internships, IAPB

- Apply active and participating methodologies
- Permanent evaluation and improvement of learning and teaching
- Managing the classroom effectively
- Taking care of individual students 'differences
- Commitment to students` results
- Establish and incentive high expectations for learning
- Systematically plan teaching, adequating curriculum to the students and school needs
- Constantly interact with the principal, school administrators and peers
- Keep the attention on the continuous learning

Academic management has been defined as a proactive process by which the teacher determines the following actions (planning) according to the institutional objectives – curricular, disciplinary, etc. and decides how these actions will be executed according to these actions (academic strategies) and also how to prove these results (evaluation) on the framework of an education of quality. ²¹

In definitive, IAPB promotes itself as an “effective school” for the following reasons:

- It is on the verge of pedagogical innovation
- It has high expectations for the achievement of their students
- Teaching is effective, innovative and creative
- Promotes efficient learning, autonomous and permanent, systematic and continuous valuation
- It has a team of teachers committed with students 'results

D.- Impact and effectiveness of ILE:

²¹ Presentation by the principal of IAPB, Mr. Humberto Lepe

RESULTS:

Current students and graduates from IAPB realize that to have studied there has opened professional horizons for them. For many of them this has been the experience that has changed their lives. “One of the academic awards that exist is an internship abroad, and this was obtained through the contacts with the counsellors. First an international firm was contacted, people realized there was a very good training and that allowed that three students got the scholarship, which will change their lives forever”.²²

For the team of teachers and those who work at IAPB, graduates are a vivid testimony of the accomplishments that IAPB has made on them. There is a graduate student who is now working in China and who feels really proud of everything he learned at IAPB.

The Advisory Council represents a real connection with the job market. This is very relevant because OECD has studied the case of Chile and has said this aspect has to be reinforced if we really want to move forward on technical education.²³

Graduates from IAPB “are very proud *pascualinos*, have that pride on them, and are well evaluated when they work, they have a quality stamp and mainly they have the mark of good values, which allows them to keep developing themselves”.²⁴

Evaluations

On the test that is applied in Chile to students from 8th grade and in 10th grade, called SIMCE, this high school has been the one which gets best results from CODESSER.

The results for the national evaluation exam, SIMCE, have improved systematically from year 1998:

²² Op. cit.

²³ OECD, Learning for jobs, Chile, Simon Field y Viktoria Kis, 2009

²⁴ Interview with the advisory Council

SIMCE RESULTS (above 250 points is considered a score above average)

Year	Language	Mathematics
1998	229 points	243 points
2001	248 points	254 points
2003	248 points	263 points
2006	251 points	282 points

Year	Students who have finished their studies	Graduate students	%
2003	61	56	91.80
2004	56	54	96.20
2005	56	53	96.64
2006	66	62	93.94
2007	69	62	89.86

Even when the results have been good and encouraging, IAPB is aware of their weaknesses and currently they are working on those areas, like language, English and mathematics.

INDICATORS

This Institute has been recognized as the best institute for agricultural studies in the country, promoting social mobility and providing more opportunities for their high school graduates. In this institute institutional, curricular and teaching methodologies are developed with autonomy.

An important result for the institute has been the employability index. By year 2010 85% from IAPB graduates were working, as is possible to see in the following charts:

Follow up of studies, 2009. Graduates from 2005, 2006 and 2007 (graduates 2008 on internship). Activities that graduates from IAPB are currently developing (March – May 2009)

Graduation year	Number of graduates	Just working		Just studying		Studying and working	
		Number	%	Number	%	Number	%
2005	56	44	78.57	7	12.50	3	5.36
2006	66	54	83.08	5	7.69	1	1.54
2007	69	49	73.13	10	14.93	2	2.99
Total	191	147	78.19	22	11.52	6	3.14

Graduation year	Number of graduates	Unemployed		Other		No information	
		Number	%	Number	%	Number	%
2005	56	1	1.79	1	1.79	0	0.00
2006	66	4	6.15	1	1.54	1	1.52
2007	69	1	1.49	5	7.46	2	2.90
Total	191	6	3.14	7	3.66	3	1.57

Graduates from IAPB who are working at the agricultural sector or others

Graduation year	Number of graduates	In the area		In other sectors	
		Number	%	Number	%
2005	47	30	63.83	17	36.17
2006	55	46	83.64	9	16.36
2007	51	35	68.63	16	31.37
Total	153	111	72.55	42	27.45

INDICATORS FOR EXCELLENCE**Instituto Agrícola Pascual Baburizza, IAPB**

Indicator	Measurement	Observations
Graduation rate	85% +	With respect to the number of students at the beginning of 11 th grade (by April 15 th each year)
Retention rate	95% +	Each year school dropout is only 5%.
Promotion rate	95% +	Each year no more than 5% doesn't accomplish with the academic standard
SIMCE 10th grade	300 + points	Lineal average
PSU	475 + points	475 is the minimum for each student
Pre job internship	2 weeks/year from 11th to 12th grade	It can be in a maximum of 2 times/year
Job internship	4 months/graduates	Within the year after graduation
Graduates year 1	Satisfaction (employer,	Quantitative survey

	students, parents, graduates)	(discipline, training on values, technical knowledge, effectiveness at the job)
Graduates year 1	90% + active	Studies, works or both (% of unemployment)
Graduates year 3	Higher income	Based on the salary of a recently graduated student
Graduates year 3	50% in higher education studies	Studies or work/study
Graduates year 5	Higher income	Based on the salary of year 3
Graduates year 5	Finished higher education studies	Certificate of studies received
Agreements with the productive sector	Formal agreements with the productive/firm sector on the zone	Existence of the council of advisors, internship agreements, etc.