

**APPLYING EXTERNAL COACHING
A MODEL TO PROMOTE COLLABORATION AND CONTINUOUS
IMPROVEMENT**

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- Themes of the conference: Collaboration. Track 2. Filling the Gap Between Lifelong Learning and Organizational Development
- Indicate the rationale of the proposal justifying why it fits the chosen conference topic.
It is a proposal that fits the purposes of enriching continuing education and organizational development. It presents a coaching model that goes beyond the traditional classroom lessons and where industry-university collaboration is enriched, and both parties expand their knowledge and skills in order to solve problems and implement a culture of continuous improvement. The model can be replicable in any university.
- Indicate the format of the contribution: Short paper

a) Introduction

The traditional classroom-based education model is sometimes no longer enough for organizations. Nowadays, business and industries face different problems that varies in complexity and clarity. This have brought new forms of dealing with them like executive coaching (EC). This innovative form of leadership deals with uncertainty in the real world. Is a group learning and development intervention that uses a collaborative, reflective, goal-focused relationship to achieve measurable outcomes that are valued by the coaches (Gabrielle 2004). This paper presents a proposal to promote external coaching and enhance collaboration between industry and university.

Coaching is defined as helping relationship between a client (who has managerial authority and responsibility) and a coach who uses a wide variety of behavioural techniques and methods to help the client achieve a mutually identified set of goals to improve his or her professional performance and personal satisfaction and consequently to improve the effectiveness of the client's organisation within a formally defined coaching agreement (Liz 2002). Learning by doing, with reflections on what has been learned, brings theory and practice closer to one another. Especially tacit knowledge and learning of skills that can only be expressed in words with difficulty will only be learned through practice. Learning by apprenticeship and practising new skills narrow the gap between theory and practice, provided that the organisation establishes conditions where learning is legitimate (Lotte 2000).

In 2011, the industrial engineering department of Tec de Monterrey Campus Guadalajara, start with an initiative to promote projects of collaboration with organizations in the region. This initiative emerge as a result of the need of such organizations searching for advice in order to solve different problems, mainly related to low efficiency and productivity of their operations, as well as problems with its organizational structure.

This paper documents a proposed coaching model, based on the principles of action research and the cycle of continuous improvement, with the aim of implementing and promoting a culture of improvement in organizations. The model is explained in detail and three cases of implementation are presented. The model was implemented in three organizations from different areas: health, retailing and logistics. It is worth mentioning that within this model the roll of teachers and students was a key aspect for success, and helped to enrich their development. Positive results, in both operational and organizational level, were observed in the three organizations.

According to Edgar Schein (H. 1995), Action research (AR) has been used as an extension of clinical work where the client in the process of seeking help begins to engage in inquiry and research processes with the help of the consultant clinician, thereby making the clinician more of a researcher. In addition, the CEO invites the consultant to help him or her build a better team among his or her subordinates. Action Research not only investigated and improved management practice but also developed managerial competences of those involved in the research. An Action Research team of organisation personnel was specially formed to undertake the necessary fieldwork. The team members who were specialists in their own area participated voluntarily in the study. Their satisfaction was the experience they gained from the project and the opportunity to work together as a team (Paul and David 2002).

b) Objectives of proposal

The objectives pursued by the model are the following:

1. To encourage the linkage and collaboration between organizations and the university through a Coaching model based on the principles of action research and the cycle of continuous improvement.

2. To promote the exchange and generation of knowledge between organizations and the university.
3. To encourage the development of teachers and students.
4. To understand a real problem through a structured diagnosis.
5. To generate and implement jointly proposed solutions that lead the organization to initiate, maintain and promote a culture of continuous improvement.

c) Work methodology

The methodology is based on the principles of action research and the cycle of continuous improvement (Figure 1). It considers that the client perceives the symptoms but the causes are not identified, and the consultant is called to carry out, in conjunction with the client, a diagnostic work and solution proposals through the plan- do- check-act cycle (Barry 2002).

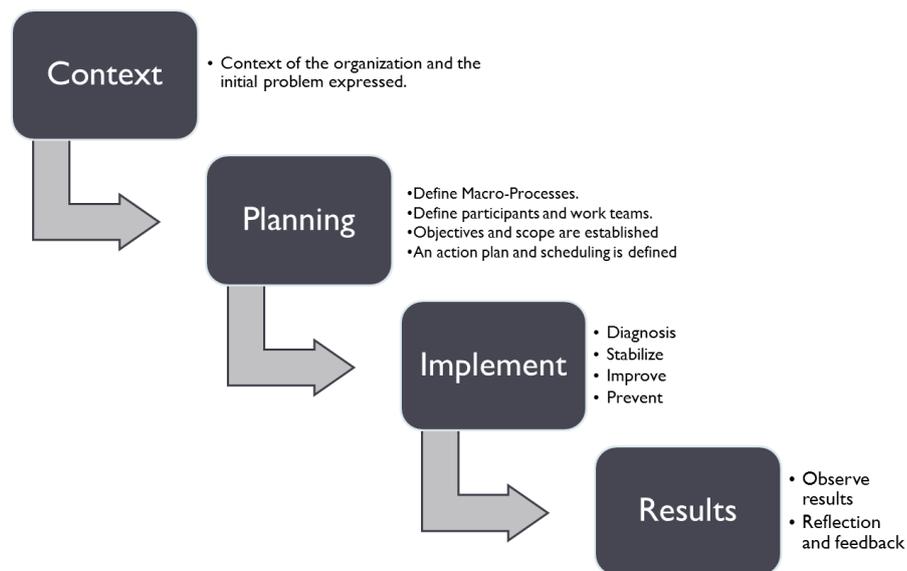


Figure 1. Model of intervention.

The model contemplates the following stages:

1. Understand the context of the organization and the initial problem expressed by the owner of the problem.
2. Planning the intervention.
 - 2.1 Define Macro-Processes.

It is important to select those critical processes in which the project should focus.

2.2 Define participants and work teams.

For each macro-process, a work team is defined. Each team is assigned a coach, an assistant and a small group of participants highly involved in the process (Figure 1). It is also required a project leader and a person of the organization who facilitates and integrates information (Figure 2).

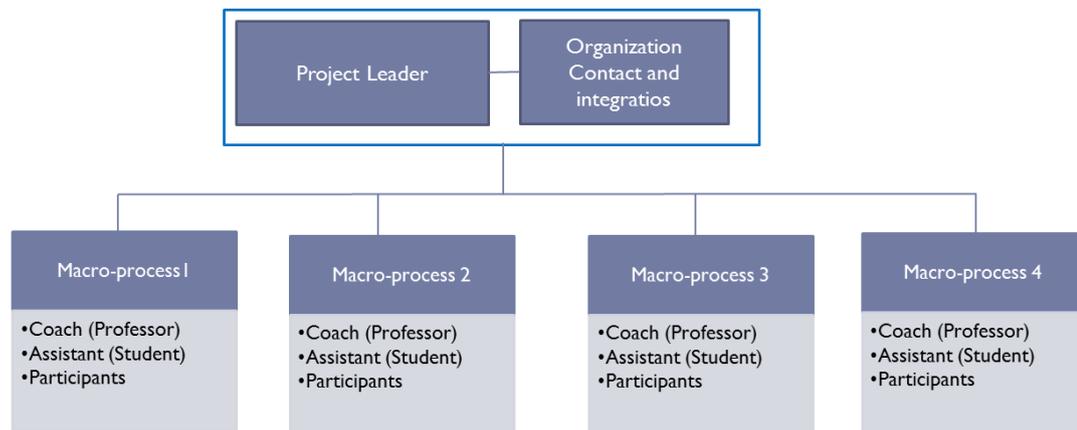


Figure 2. Work teams structure.

2.3 Objectives and scope are established

2.4 An action plan and scheduling is defined

3. Implement the action plan

The implementation plan is based on a continuous improvement cycle. The plan involves the following stages (Figure 3):

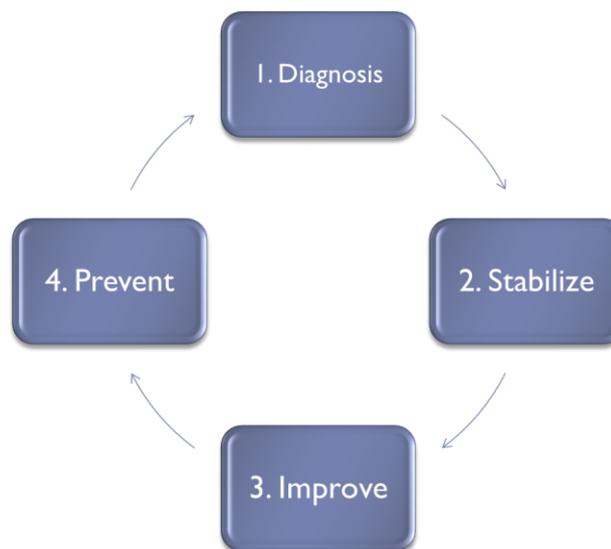


Figure 3. Implementation plan.

3.1 Diagnosis.

The main objective in this stage is to determine critical activities and performance indicators. It is also important to determine, in a consensual manner, major problems of the organization and waste in all its forms. Some tools are applied such as Nominal Group Technique, Organizational Climate Analysis, macro diagrams of activities, and finally a waste walk detection in place.

3.2 Stabilize.

Mapping the processes with the objective of finding points of conflict, critical activities, degree of control, and current level of efficiency. Some tools are applied such as Supplier-Input-Process-Output-Client (SIPOC) analysis, Failure Mode and Effect Analysis (FMEA), Control Plan, and Value Stream Mapping (VSM).

3.3 Improve.

Based on the results of the two previous stages, the aim of this stage is to generate solution proposals and specific improvement projects.

3.4 Prevent.

Once projects are implemented and results are achieved, this stage is focused on standardization as a way of prevention. To generate or modify operation manuals is part of this process.

4. Observe results, reflection and feedback.

d) Conclusions/results.

A coaching model is proposed, it highlights the collaboration and exchange of knowledge between the industry and the university. Three success cases are presented in the Healthcare, Retailing-Furniture, and Logistics sectors, with the following results: The project 1 was applied in a private hospital level 3 of specialities there was an approach with the Tec de Monterey due to problems mainly related to low efficiency in its processes and poor customer satisfaction. In this project, all the stages of the methodology were fulfilled, including the prevention stage. As shown in Table 1, the results were very important in the areas of Emergency Room, Medication, Purchasing and admission, such areas are considered strategic for the improvement of the hospital.

Project 2 was carried out in a company dedicated to the logistics of import and export of products (Table 2). The main problem expressed was a lack of coordination among their managers due to a lack of mission and vision by the owners; these problems were translated into important conflicts in the operations. The project focused on strategic planning, organizational structure definition, as well as a mapping and diagnosis of their key processes that included import, export, handling of perishables and palletizing of products. Project 3 was carried out in an important furniture store in the region with a specific need for expansion and growth, so it was important to diagnose and improve its processes. For this, there was also a need to carry out strategic planning, diagnose the current state of its processes, and redefine the lay-out of its main warehouse (Table 3). In conclusion, the university industry relationship and collaboration was strengthened. This paper presents an educational model for the development of teachers and students in order to enhance continuing education.

Project	Problem Context	Main Objective	Scope	Macro-Process	Main Results
3rd Level Hospital	Disorganization and poor service and satisfactions level.	To incitate a continous improvent culture a processes-redesign	Mapping process and implementation of Lean Healthcare tools in four macro-processes: Admission, Procurement Emergency Room, Medication.	a) Emergency Room	Reduction of the average time of stay in the emergency room by 51% Increase in the customer satisfaction index from 94% to 98.9% Reduction of consulting room utilization by 13%
				b) Pharmacy and medication	Reduction of the number of errors in the medication administration process by 66%. Reduction of the percentage of medical prescriptions with error by 28%. Reduction of medication delivery time by 8% Reduction in the number of pharmacy bills with an error of 33% Reduction of the number of erroneous requests per nurse by 98% (Poka-Yokes and double checks were applied)
				c) Patient Admision	Reduction of the delay of delivery of rooms Definition of actual costs by type of room Impact and relationship with insurers Impact and costs when making room changes
				d) Procurement	Increase of orders correctly stocked from 88% to 96%. Definition of the impact on the distribution of purchases and rents Decrease in the costs of special income NOT tabulated by 10%.

Table 1. Project results Hospital

Project	Problem Context	Main Objective	Scope	Macro-Process	Main Results
International Commerce Warehouse (Logistics)	Poor communication between departments and lack of mission and vision of the company. Poor efficiency main processes.	To establish a new organizational structure and determine key processes.	To define a new Mission and Vision of the company, to define strategic objectives and key performance indicators. And to perform a Diagnosis in four main processes.	a) Strategic planning and organizational structure	Hoshin Kanri applied, Mission, Vision and Values established, New Organizational structure established.
				b) Imports	Diagnosis established with a 51.6% of efficiency.
				c) Exports	Diagnosis established with a 15.6% of efficiency.
				c) Palletization	Diagnosis established with a 70% of efficiency.
				d) Perishables	Diagnosis established with a 58% of efficiency.

Table 2. Project results Logistics

Project	Problem Context	Main Objective	Scope	Macro-Process	Main Results
Retailing-Furniture	Poor communication between departments and lack of mission and vision of the company. Poor efficiency main processes.	To establish a new organizational structure and determine key processes.	To define a new Mission and Vision of the company, to define strategic objectives and key performance indicators. And to perform a Diagnosis in three main processes. Main warehouse re-design.	a) Strategic planning and organizational structure	Hoshin Kanri applied, Mission, Vision and Values established, New Organizational structure established.
				b) Sales	Diagnosis established with a 30.0% of efficiency.
				c) Projects	Diagnosis established with a 18% of efficiency.
				d) Logistics	Diagnosis established with a 23% of efficiency. Warehouse lay-out design implemented.

Table 3. Project results Retailing-Furniture

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