## Peru: Introducing action-oriented learning - but how?

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It is nowadays an undisputed fact among almost all actors in vocational training across all borders that training has to be modernised constantly. In this, action-oriented learning is a principle that can make an essential contribution to modernisation, given that it supports the learning of more complex forms of professional action ability. Though how this is going to be realised, requires careful consideration regarding intervention strategies and concepts to be used. First of all training courses and scholastic curricula have to be rewritten – modules offer the background for newly designing learning situations and learning surroundings in integral perspective.

By using experiences from Peru, I'd like to present a strategy for introducing action-oriented learning (<sup>1</sup>). It concerns the educational institution "SENATI" that has taken over the part of a joint training centre in the context of dual vocational training. SENATI is the biggest private educational institution in Peru, with more than 24 educational centres at their disposal all over the country. The training as a car mechanic, industrial mechanic, etc. usually takes three years. It is followed by the option for training as a foreman in the respective professional area.

Starting point for changes within the institution are new professional profiles, whose realisation is following the principle of competence-based training with modularised curricula. Mathematics, technical drawing and technologies are taught project-oriented, with the training workshop standing in the centre of the training as a learning location.

Within the SENATI institution, training received a completely new design, with the idea of action-oriented learning being pursued resolutely to the end and the differentiation into theory and practice no longer existing like that. Apart from the organisational turn, this requires above all qualified teaching staff, given that instructors will be responsible for modules in the future and be teaching both practice and theory within the modules. Theory follows practice. Theory will be instructed in the way the process of the training projects requires.

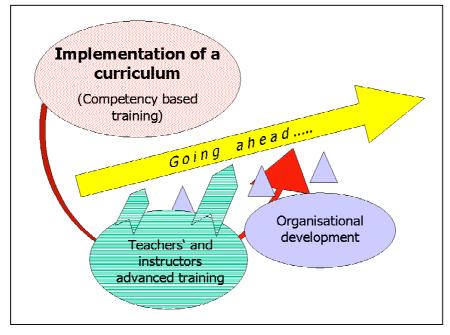
SENATI carried out thorough investigations concerning the methodological design. The project method suggests itself as the main instrument of design in didactical modernisation, given that the educational institution can look back at a long tradition of project-oriented learning. Didactical modernisation counts on the follow-up capability of their concepts with the training staff.

Modernisation takes simultaneously place on three levels:

Since 1996 I am working as a specialist in the co-operation of several professional training institutions in Latin America. From 1998 to 2000 I worked in a project of the GTZ (Society for Technical Co-operation) for system advice of the Argentine ministry of education. The concepts there developed and adapted from German contexts of modern teaching and learning methods have nowadays also gained access into other institutions. Project method, training firm/learning office, the principle of action-oriented learning i.e., are modules in the modernisation of professional training systems that are enjoying great popularity with the partner organisations.

- 1. on the level of organisational development,
- 2. on the level of personnel development and
- 3. on the level of introducing new curricula.

All three levels of intervention entertain interdependent relations with each other; none of the levels is viable without the others. Traditionally institutions take the way via the curriculum. Instructors and teachers receive the new curriculum and are supposed to realise it. Speaking from a long experience of counselling educational institutions, I would strongly advise against that. The approach SENATI has taken was that of giving priority to personnel development in close connection with organisational development. The elaboration level of the curriculum in the training workshop and the instruction rooms is put last.



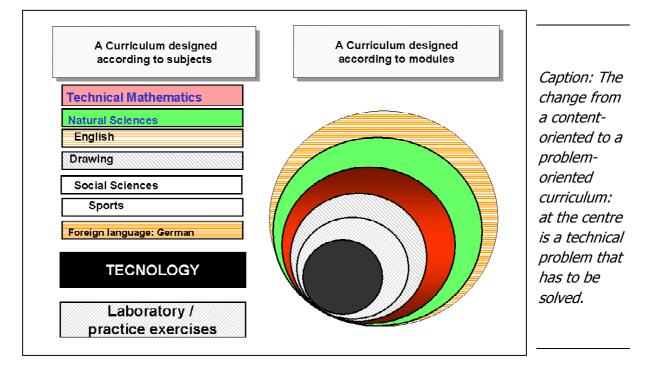
This is based upon the findings, that extensive changes in the whole organisation as well as changes in almost all jobs of the training personnel will follow the introduction of problemoriented learning with the set of methods adequate for this form of curriculum.

In a first step SENATI has build a core group of twelve pedagogical

multipliers within in the group of instructors. The group received training in the new methods for pedagogical moderators in the instructors' advanced training. The training ended with an examination certifying the instructors' status as multipliers for further personnel development. For the revised technical design of the training, analogous groups of multipliers were formed for the different fields of profession. First of all the group of multipliers together with the heads of the institution identified the fields affected by the introduction of action-oriented learning. Thus the institution designed in a next step a new instructor's profile, that meets the increased demands. With that, the multipliers were capable of purposefully developing further training modules, by means of which the personnel of the professional fields affected by the change can be qualified systematically.

But the changes are also very extensive in other areas. The quality management according to ISO 9000 has to be newly structured. The criteria are no longer referring to the previously prevailing four-step-method of instruction but have to be revised according to action-oriented principles of learning, a process that is not yet concluded. Timetables no longer show mathematics and technical drawing, but assign learning groups with rooms and time schedules for training projects that have to be carried out.

In order to be able to introduce this change, SENATI had selected three training centres where a pre-implementation is taking place. The pre-implementation is accompanied by a monitoring process in order to be able to detect occurring problems and tackle them by using measures of organisational development. The instructors, yet inexperienced in planning training sequences, are confronted with the problem of assigning time guidelines, given that the small training projects (extension approximately 8-24 hours) don't allow to anticipate precisely when it is best for training in the workshop or rather teaching in the classroom. The only fact is that the previous division of theory and practice no longer exists like that and has to be redesigned not only in regard to time but also content and concept. At this the institution tries to offer itself a wide field for experiments, a measure that leads through extensive use of horizontal structures to a predominantly vertical organisational structure and to numerous conflicts in an organisational structure that mainly relies on instructions.



Concerning didactics the adaptation to a problem-oriented from a content-oriented curriculum shall be managed with the introduction of the project-method as the prevailing training method. The principle of the complete action serves the interior structuration of the training projects with the stages of information, planning, decision regarding work performance, execution, control and evaluation. At the core of the introduction of new training methods is a seminar concept for the introduction of the project method that sets out on various levels. The project method and the principle of action-oriented learning are presented by planning the seminar itself project-oriented and following the principle of action-oriented learning. For the time being, this confronts the newly trained multipliers with enormous problems, since not only do they have to put their knowledge but as well all of their skills to the test. In the instructors' advanced training the new training methods come along with living examples. Knowledge and skills, the acquaintance with new methods and the training of their utilisation belong together. The third axis for every seminar has to be the elaboration of several training projects in small groups. For technical revision the multipliers will accompany this work stage. To this extent SENATI designs the new curriculum by using the means of personnel development on the level of didactical concretization, because following two training events

in each of the three pilot centres approximately twenty usable projects in the field of car mechanics originated in the different modules. Right now these projects are being realised in the training workshops accompanied by the multipliers. The multipliers have different monitoring instruments at their disposal, primarily observation sheets that record either theme-centred or process-centred difficulties and successes during the adaptation. With that the instructors receive a feedback. The observations serve as well as a foundation for the third seminar with the instructors. Here the project planning is subjected to critical scrutiny. Especially learning and working tasks are specified in this stage. What is determined and what belongs to the setting of the task? It turns out that the precise phrasing of the task setting as well as the necessary purposeful processing of information material belong to the most difficult tasks. Since instructors so far are very little familiar with the planning of training; the institution has to make a lot of experiences in this area. An adequate quality of learning and working tasks with a time schedule can only be achieved in several quality circles and be elevated on a high level step by step.

The previous approach of organisational development as a top-down model receives its complementary side of a bottom-up in these seminars: the problems of organisational nature that occurred during the implementation are meticulously documented and evaluated. First measures for the comprehensive changes of the institution have been introduced in a first seminar between multipliers and the directors of the three training centres as well as the national management and the department responsible for personnel development. Hence a group was installed for example that is going to revise the organisational quality criteria according to ISO 9000.

The principle of action orientation, action-reflection-new action, also defines the proceedings in the second stage of organisational development. The experiences made in introducing new methods are systematically reflected and evaluated within the scope of measures of personnel development, in order to provide the means for the construction plan for the comprehensive introduction of the new methods with the didactical design principle of action-oriented learning. It is still a long way, but the personnel of SENATI have covered quite a distance. Lessons learnt? I think, that for introducing successfully action-oriented learning according to the didactical-methodological approach of acquired techniques with teaching and working tasks a comprehensive qualification of instructors and teachers in competence-based training courses is indispensable.