

CIEA 2002

**How does training become successful
in different systems and different basic conditions?
- Experiences from Honduras**

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Friday, 23 August 2002

In February 2002 Zamorano staged the CIEA 2001 Seminar "Moving from Discussion to Action: a Multidimensional Change in the Institutions of Agricultural Education". Zamorano had already staged three seminars previously: in 1995 "Training Agricultural Professionals for the 21st Century", in 1997 "The Quality, Coherence and Competitiveness of Agricultural Education in a Changing World", and in 1999 "The Invisible Curriculum, a Key Factor in Vocational Agricultural Training".

The objective of the CIEA Seminar 2001 was to help the participating educational institutions in their efforts to achieve necessary change now or in the future, and it was focused on four fundamental themes: 1. institutional government and management; 2. occupational profiles; 3. the theoretical curriculum and experience-based learning; and 4. the invisible curriculum. The seminar included a conceptual and methodological survey of the results and endeavours of previous CIEA seminars, sharing and analyzing the best practices in educational management and methods to be applied in middle-level and higher-level agricultural teaching institutions, in order to contribute to the improvement of Latin American agricultural teaching in the third millennium.

In the CIEA seminars of 1995, 1997 and 1999, the emphasis was on assisting agricultural universities, not institutions of middle-level agricultural teaching. Those present then were invited, with all their expenses paid, and they seemed to attend as independent participants, not as representatives of an institution. For the CIEA Seminar 2001, however, invitations were issued to agricultural universities and colleges, and these institutions selected the participants according to the requirements of that particular seminar. Each institution selected five participants to represent its educational system: one to represent the highest authority-level of the institution; one executive manager or main administrator; one senior lecturer well respected in the institution; one junior lecturer with leadership potential; and one representative of the students. 64 representatives from 14 institutions in 11 Latin American countries participated; and teachers, students and administrators from Zamorano also took part.

The methodology used took various forms. Before the participants arrived in Zamorano, they were required to develop an activity in their own institution, this being a compulsory precondition for the participating institutions. This activity was an analysis to determine the condition of agricultural education (a) in their own institution and (b) in their own country as a whole; and it included a survey and discussion of the changes occurring in the institution in order to adapt to the new century. These documents were handed in when the participants arrived in Zamorano, they were edited during the CIEA Seminar 2001, and the results will be published in the review Ceiba, Volume 42, Number 2 (July-December) in 2002.

Before the seminar began, the institutions were divided into two groups, ensuring that institutions from the same country were not in the same group. One group consisted of: the Romulo Gallegos University (Venezuela), the Autonomous University of Chapingo (Mexico), the Charagua Higher Technical Institute of Agriculture (ISTACH) (Bolivia), the National University of Asuncion (Paraguay), the Rafael Landivar University (Quetzaltenango, Guatemala), the Luis Landa School of Agriculture (Nacaome, Valle, Honduras), and the National Autonomous University of Nicaragua (Leon, Nicaragua). The other group consisted of: the La Molina National Agrarian University (Peru), CODESSER (Chile), the National Agricultural University (Catacamas, Olancho, Honduras), the National Agrarian University (Managua, Nicaragua), the Roberto Quinonez School of Agriculture (El Salvador), the Genova German Foundation for Education (Mamachi, Ecuador) and the National Central School of Agriculture (Barcenas, Guatemala).

In the group exercises, the participants came together as general representatives of their own institution, or they represented a particular function in their own institution. This methodology enabled all the members of an institution to meet in order to discuss the main topics of the seminar from the standpoint of, and for the benefit of, their own institution. Group-work based on the function of participants made it possible to bring together participants with a similar viewpoint (for example, all the students discussed a topic from the point of view of students), but with points of view that were sometimes opposed and more diverse, as between institutions from different countries or between a university and an agricultural college.

The object of the first group-activity was for the participants (separated according to their functions) to analyze the experiences of the previous CIEA seminars held in Zamorano, with emphasis on the topics of institutional government and management, the technical curriculum, the practical curriculum and the invisible curriculum. Each delegation received copies of the reports of the CIEA seminars held in Zamorano in 1995, 1997 and 1999. Then all the members of each institution came together to analyze the same experiences and to decide what they could learn from previous CIEA seminars to benefit their own institution. At the end, each university or college presented a wall-chart of its conclusions, and an idea-market was organized in which each institution displayed its proposals to the rest of the participants.

Three lectures were given to cover all the topics of the CIEA Seminar 2001. The lectures helped the institutions to make analyses and to extract the relevant aspects that could apply to their own educational context for the benefit of their students and, ultimately, for the society they serve.

The first lecture was "Facilitating change in educational institutions": this was a videoed case-study of the conversion, two months previously, of the National School of Agriculture (the ENA) into the National Agricultural University (the UNA) (Catacamas, Olancho, Honduras). The video showed that there is a positive attitude towards the restructurings that are being made in order to improve the scope of education offered by institutions and to streamline their administrative procedures. After the video, the participants divided into groups, according to their special function or representation, in order to answer these questions: What administrative changes do you consider that the UNA should implement in order to facilitate the change from college to university? Why? Why was it believed that it was necessary to change the ENA? For whose benefit? What cultural changes will the UNA have to promote among its staff? What problems will the UNA be able to deal with in the near future? How will the UNA have to solve these problems? The results were presented in a panel, with a representative of each function answering the questions: Is political interference always negative? Why was there this change into the UNA? What form should institutional government take? This topic ended with the meeting in institutions to answer the questions: What changes will there have to be in your institution? Why? What process do you recommend to facilitate these changes?

The second lecture was "The technical and practical curriculum: changes that have had positive results". This lecture explained the changes that had to be introduced into curricular planning, and which meant creating four new courses in Zamorano, Honduras. The lecture explained the functioning and development of modules and macromodules, time-management as regards the alternation of classes, and the Zamorano principle: "learn by doing", which was seen in the performance of Zamo-enterprises, in which both teachers and students played a part. Emphasis was placed on the structural hierarchy of academic administration, on production, implementation and the development of extracurricular activities. There was a discussion on the positive results that were obtained from the changes that were made.

The lecture generally told the participants more about the Zamorano model in vocational agricultural training. The lecture was analyzed by the participants meeting in groups according to their institutional functions, and the following questions were to be answered: What changes did Zamorano decide to make to its curriculum, and why? What caused the changes to be made in Zamorano? Because of whom were the changes made? Have these changes created problems for the Zamorano staff? How have these problems been dealt with? What strategy did Zamorano use in order to implement the changes? The members of each institution then made an analysis, the objective of which was to determine the changes which the institutions should make in the areas of the technical curriculum and the invisible curriculum in order to offer a better academic service. They answered the questions: Bearing in mind the presentation of Zamorano, what other changes could you suggest in the theoretical and practical curricula of your own institution? What process would have to be implemented in your institution in order to bring about the changes mentioned?

The third lecture was "The CODESSER experience", a presentation of the creation, organization, administration and management of the Corporation of Social Development in the Rural Sector (CODESSER), now known as the SNA Educational Corporation, whose mission is to promote the development of the rural sector by means of education and training, and whose task is to supply human resources for the farming and agroindustrial sector by providing medium-level technical education. The lecture was analyzed by each institution, which answered the questions: Of the four levels of innovation that have been presented, at what level do you consider that your institute should and can arrive? What strategies and procedures can be put into practice in your institution in order to ensure innovation at classroom level? What strategies and procedures can be put into practice in your institution in order to stimulate practically the invisible curriculum, and to integrate it into the rest of the curriculum?

In addition to the three lectures, there were also idea-integration exercises.. The first of these, "Hidden agendas", consisted of role-playing with five characters who were participating in a meeting, each character representing his own interests. Each participant who played a role received instructions as to what the interests of his/her character were. Of the rest of the participants, some were to observe the characters, and the others were to observe the process of the meeting. The characters were observed in order to determine their degree of activity in the meeting, their commitment to the group, their ability and willingness to listen to others and the tactics they used in order to influence the rest of the group. The process of the meeting was observed by other participants in order to determine its atmosphere, and the degree to which the characters participated and were involved. At the end of the exercise, the institutions discussed it, and answered the questions: In your opinion, what was the object of the exercise? Is it relevant to your institution? In what other ways could this or similar exercises help to define the government and management within your institution? With whom could this exercise, or similar exercises, be used? The participants also listed concrete ideas for exercises, meetings or other activities within their institutions which would help them to make innovations in aspects of their institutions' government and management.

The second idea-integration exercise, "Crisis in Noramoza", was supposed to take place on a hypothetical island where there were serious problems of motherhood outside marriage, especially among young adolescents. In the crisis posed, the Mayor of Noramoza needs to reduce taxes, as he had promised to do this in his electoral campaign. First it is necessary to review the cost of the city's social programmes and to demand that these be changed. One idea is to channel resources through the vocational colleges of the city. Having observed the crisis described above, the participants were grouped, according to their functions, in order to analyze the situation and present solutions, recommendations and suggestions to the Mayor of Noramoza.

The third exercise was "Bricks". It concerned a group which was shipwrecked on a desert island without food. In their initial search of the island, the group discovered a little food and 2'000 bricks. Having discussed the situation, the group concluded that there will be no rescue within two weeks, and that there is not enough food to keep the whole group alive during this time. The members of the group first decide that it is very important to discuss the creative possibilities of using the 2'000 bricks in order to increase their chances of survival before any rescue can take place. The institutions then analyzed the exercise in order to answer the questions: In your opinion, what was the object of the exercise? Is it relevant to your situation? How integrated is the thinking of your college as regards aspects of the practical curriculum, decision-making, teamwork and problem-solving? Can you think of other elements that could or should form part of this practical curriculum? In your opinion, is your institution open-minded enough to try out modern methods which help the students to extend their practical skills and abilities in the elements expressed in the previous question? The participants also made a list of concrete ideas for exercises, meetings or other activities within their institutions which would help to realize innovations in curricular aspects for the development, skills and abilities of their students.

The seminar also included a mini-conference, the objective of which was for each institution to define, once and for all, the concepts and applications of the invisible curriculum. The institutions were then asked to answer the questions: In your opinion, what was the main message, or what were the main messages of the mini-conference? Is this relevant to your institution? According to the presentation, is there really any need to make fundamental changes in the education of Latin American countries? Do you consider that your institution is prepared to make such changes? Has it already started to do so? Is it necessary to remodel the changes? The institutions also made a list of concrete ideas for exercises, meetings or other activities within the institution which would help to realize concrete changes in such a way as to improve the students' vision, creativity, self-esteem, communication skills and resource-management skills.

The participants made two evaluations of the CIEA Seminar 2001. It was graded as excellent (4.0), good (3.0), fair (2.0), bad (1.0) and very bad (0.0). The students' overall evaluation was therefore excellent to good. At the end of the first week (at the halfway stage), the following categories were graded: methodology 3.39, contents 3.42, facilitation 3.73, logistics 3.54, and practical usefulness 3.56. The evaluation at the conclusion of the CIEA Seminar 2001 was: duration of the programme in relation to the contents 3.41, logistics in the structure of the seminar 3.53, the appropriate use of methods and media 3.68, the facilitators' mastery of methodology 3.81, success in conveying the importance of the topic 3.54, the stimulus to participate 3.53, usefulness of the seminar 3.69, and the general opinion of the seminar 3.68.

As the seminar progressed, the institutions built up, for their own use, an institutional portfolio, which was not shared with the other participants or with the organizers of the event. The portfolio was to show the degree of commitment acquired by the participants - both as representatives of their institution and personally - in the subject-areas of institutional management and government, the technical/theoretical curriculum, the practical/experiential curriculum, and the invisible curriculum. This portfolio is a guide for the participants in their development within the institution in the process of change.

At the end of the CIEA Seminar 2001 there was so much enthusiasm and genuine commitment among the participants and institutions, that in less than one week after the event the Rafael Landivar University (Guatemala) had set up a workshop to share the experiences of the seminar and to initiate or continue the process of change. The Luis Landa School of Agriculture (Honduras) also set up a workshop, with the help of the facilitator of the CIEA Seminar 2001, Raul Zelaya, as part of the immediate follow-up.

We have found that as follow-up activities after the CIEA Seminar 2001, the seminar partici-

pants have set up workshops with their colleagues at various universities, they have given lectures to students, to teachers and to the general public, and they have published in university reviews articles relating to the aspects covered in the seminar. Also, some institutions have already established agreements and strategic alliances with other institutions in order to improve agricultural education. At other institutions, curricular changes and the invisible curriculum are being promoted at various levels. The documentation prepared by the participants describing the follow-up activities after the CIEA Seminar 2001 are available on the Zamorano website:

<http://www.zamorano.edu/proyeccion/index.html>

The changes in the methods of the CIEA Seminar 2001, compared with those of previous CIEA seminars, were very beneficial. The seminar was improved by the fact that participants came as representatives of institutions and had more commitment to the event. Also, the analysis that they made before arriving at Zamorano benefited all participants present because it improved their knowledge of the situation of education in their own institution and their own country. The institutions did not receive 100% financing: they had to defray some of the costs of their five representatives, usually paying part of their travel expenses. This meant that the number of institutions present was increased, and that participants had greater commitment to the event. The interaction between the various protagonists of the educational process was very beneficial, as it enabled different points of view to be held concerning each topic, according to what the different people represented.

The institutions that were invited were very different in many aspects. Six agricultural colleges and nine agricultural universities were invited to discuss topics that were relevant to both educational levels. The forms of institutional and financial government of the institutions were very diverse: some institutions were totally dependent on central government; others were private; some depended partly on central government and partly on their own financial income; others were run by foundations. Some universities offered courses only in the agricultural sphere; others also provided non-agricultural courses. Some universities offered postgraduate study-courses; others offered only academic degree-level courses or engineering degree courses. One university (the National University of Agriculture, Honduras) had had only two months of experience as a university; another (the National Agrarian University of La Molina, Peru) had had a century's experience. Some institutions had only residential students; others had only external students; and some had students of both types.

All this variation between institutions contributed to the success of the CIEA Seminar 2001, stimulating the interchange of very varied and enriching ideas, experiences and knowledge. The participants were very impressed to discover the different systems of institutional management, student management, technical curriculum, invisible curriculum, practical instruction and institutional management for the acquisition of funds.

After running four CIEA seminars in Zamorano, we now need to think about the next step. We believe that this must be focused on the transition of students between the middle-level college and the agricultural university. There are many important differences between the educational systems of our vocational colleges, training colleges, rural colleges and city colleges. Each educational system responds to the needs of the students and the society that the institution serves. But the qualitative differences in the systems of secondary education mean that there is a great variation in the academic preparation of secondary-level students; this means that some students have serious deficiencies and it causes problems for the universities who accept them. Most of the graduates of rural vocational colleges and training colleges are integrated into the labour force immediately after graduation, but a large number intend to continue their studies at university level. Those who do continue at university can experience problems caused by deficient preparation in various areas (mathematics, chemistry, physics, biology, languages), and this results in a very high drop-out rate and a very high cost to society.

The next CIEA seminar should focus on helping middle-level education centres in rural zones to devise better systems of student training and successful ways to enter university or the labour market. In the medium term, effective alliances should be established between (a) vocational and non-vocational centres of secondary education and (b) institutions of higher education, in order to improve the educational level of students accepted by universities, and thus to reduce the drop-out rate and the costs of this to society. Another positive result would be that students who graduate from rural colleges would be better prepared successfully to join the labour market of their communities and countries.

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