

The Position of Specialists on Distance Education and on Higher Education Supervision in Relation to Specialization and Upgrading Distance Education Courses

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Abstract

The purpose of this article is to promote the contribution of educators in improving the quality and credibility of postgraduate distance courses (specialization and upgrading) taught in Brazil. Beginning with a review of experiences in the area, it describes the most frequent modalities of distance education in the country and then reports on consultations with a group of specialists that sought to identify their positions on the organization, functioning, and supervision of graduate education courses. The conclusions recommend that in order to ensure the quality and credibility of these courses, they have to be planned, executed, and evaluated according to the specific characteristics of tele-education, which would also give direction to the educational system. In order to do this, it is necessary to include the concepts of distance education in the curriculum of supervisors and technicians in educational matters, which leads, finally, to a recommendation for greater university involvement in the training of human resources and in the development of research in the field of distance education.

Résumé

Le but de cet article est de promouvoir la contribution des éducateurs à l'amélioration de la qualité et de la crédibilité des cours de second cycle de l'éducation à distance (spécialisation et perfectionnement) dispensés au Brésil. A partir d'une série d'expériences dans ce domaine, on décrit les structures les plus fréquentes de l'éducation à distance dans ce pays, en consultation avec un groupe de spécialistes qui identifient leur position sur l'organisation, le fonctionnement et la supervision des cours de second cycle de l'éducation à distance. Les recommandations spécifient que, pour assurer leur qualité et leur crédibilité, les cours doivent être planifiés, enseignés et évalués selon des caractéristiques propres à la téléenseignement, susceptibles de donner également des directives au système d'éducation. Pour ce faire, il est nécessaire d'inclure le concept de l'éducation à distance dans le cursus des superviseurs et des techniciens de l'éducation, ce qui mènerait finalement à recommander une plus grande participation universitaire tant dans la production des ressources humaines que dans le développement de la recherche dans l'éducation à distance.

Introduction

Nowadays in Brazilian society, there is a conviction that education in general - and, more specifically, higher education - does not respond to the needs of the actual national socio-economic situation. Graduate courses offered by higher education institutions are not in themselves capable of producing sufficient professionals for the job market, which is extremely diversified and constantly changing (Zentgraf, 1988). In addition to master's and Ph.D. programs, post-graduate courses of a professional nature that would strengthen the basic background acquired in undergraduate studies and that would update the knowledge of professionals already in the job market are necessary.

In dealing with the concept of graduate work, a study made for the Federal Council of Education, Sucupira (Brazil, 1975) initially distinguishes, graduate work "sensu stricto" (master's and Ph.D.) from graduate work "sensu lato" (specialization and upgrading). In their research on graduate work in Brazil, Cordoba, Gusso, and Luna (1986) affirmed that the reasons for the creation of graduate programs in universities are basically internal and that among the external reasons, job market needs do not stand out. Among the conclusions of the research, as a reason for the implementation of graduate education "stricto sensu," the following motivation is important: "To institutionalize the space for scientific research and to produce qualified teachers" (p. 47).

This work and others have emphasized that training of personnel, directly focusing on the productive sector, is not a priority for graduate education "stricto sensu." This shows the importance of specialization and upgrading courses to service these "clients." It also shows the need to encourage and to place value on courses of a technical/professional nature that focus mainly on adapting the professional to a constantly evolving and diversifying job market. Those courses are not regularly scheduled, have continuing education characteristics, and issue certificates. They differ, however, from the "stricto sensu" graduate courses, which are regular and systematically organized, have academic priority, and grant master's or Ph.D. diplomas.

The specialization and up-grading courses have specific characteristics that make them different from other courses. The former focus on improving knowledge, abilities, and attitudes necessary for competence in a specific delimited area of knowledge or of the profession. They constitute an additional stage towards graduation - a stage of professional training for functions that respond to the multiple exigencies of the job market (Carvalho, 1976).

Upgrading courses, on the other hand, focus on improving and upgrading the knowledge of professionals in their respective areas of work, so that they won't become out of date in the light of the many scientific and technological transformations that make obsolete the background of those who, although they are in the job market, are not directly connected to the production and transmission of new knowledge (Carvalho, 1976).

Because of their relation to the productive system, specialization and upgrading courses have to be structured by joint action by the educational institution and the user bodies on matters concerning objectives, strategies, and schedules, leaving, however, the operation as the responsibility of the educational institution alone. They constitute, therefore, a space for educational institutions to express creativity and to contribute to the educational, technical and cultural development of the country. They are opportunities for innovative pedagogical experiences and also alternatives to conventional courses that are difficult to find in the other segments of higher education since they are controlled by rigid and formal legislation.

Brazilian Experiences in Specialization and Upgrading Distance Education Courses

The alternative experiences of "lato sensu" post-graduate education through distance programs are very few in Brazil. There are some isolated initiatives, characterized by short-term duration, whose few or not-divulged results are lost. Thus this course modality has been prevented from developing and improving and, therefore, prevented from supporting the regional needs and from taking to distant cities and communities new knowledge produced for science and technology. In this sense, the number of requests made to the few institutions that develop specialization and upgrading distance education courses originating from enterprises and professionals who need to strengthen and upgrade technical-professional knowledge and are unable to do so because of schedule conflicts or the non-existence of such courses in their cities is significant (Oliveira & Magalhaes, 1985).

Since 1979, in the modality of specialization and upgrading, some pioneer projects on the utilization of distance education stand out. They are:

- The pilot project for "graduate *lato sensu* courses by tutorial education at a distance," an agreement between the Coordination of Specialization of Higher Level Education People (CAPES) and the Brazilian Association of Technological Education (ABT), developed between 1979 and 1983, with the purpose of supporting the specialization and upgrading needs of teachers in interior locations who work in the superior educational system (Oliveira & Magalhaes, 1985).
- The project "Educating the Educator," an agreement between the Brazilian Foundation of Education (FUBRAE) and the Association of Educational Supervisors and Advisors of the state of Goiás, developed between 1983 and 1986 with the purpose of specializing and upgrading professionals in their respective areas of activity. The project was carried out by the Educational Center of Niterói (CEN), FUBRAE unit (FUBRAE-CEN, 1983 to 1986).
- The specialization course in educational technology through distance teaching of the Brazilian Association of Educational Technology that has been given since 1981 with the purpose of improving higher educational standards through a critical vision and scientific treatment of educational problems (ABT, 1980).

- The specialization course in school administration, an agreement between the Federal University of Paraiba and the National Campaign of Community Schools (CENEC), given in 1982, 1983 and 1991, with the purpose of qualifying directors practising in "cencicists" schools of Paraiba, Pernambuco, and Alagoas. A specialization course in environmental education is in the planning phase (Henriques, 1992).
- The project "New Knowledge," of the Salgado de Oliveira Educational and Cultural Association (ASOEC), in operation since 1988, with the purpose of strengthening the knowledge of teaching professionals (ASOEC, 1988).

All cited projects have a workload of more than 360 hours; the ABT ones are developed by correspondence, the other ones through distance education in a semi-indirect modality, i.e., periods of individual instruction are interspersed with periods of teacher and colleague meetings.

As can be seen, the number of specialization and upgrading courses that benefit from tele-education is still limited, although it has an essential role to perform in a country with continental dimensions like Brazil.

Among the reasons for the persistence of this situation are not only the rigidity of the educational legislation and distance education's lack of credibility among a large part of society - but also the way university sets itself apart. Based on statements presented in the 1st Cycle of Debates about Distance Education, tele-education in higher education is a matter timidly approached: "the academic community has to be alerted, valued, and stimulated in order to get out of this inertia" (Brasil, 1987, p. 65).

Oliveira (1985) suggests developing programs of distance education in conjunction with institutions of conventional education in order that the proximity and familiarity can help change this lack of understanding and prejudice that dominates a great part of the academic community. It is opportune to emphasize the statement of Myrthes De Luca Wenzel, director of the Educational Center of Niterói, a pioneer institution in utilizing teleeducation in different educational projects. She believes that specialization and upgrading courses taken through distance education suffer resistance from many sectors of the educational system, from the academic community and, many times, from the business user itself. Valuing these courses originates from the users who, through them, find answers to their needs (Wenzel, 1988).

In 1990 the executive power presented to the National Congress a pre-project for creating an Open University linked to the Ministry of Education and Culture, having as its objectives amplifying and democratizing access to higher education. This project is still under analysis by the educational commission in the Congress of Deputies. The space saving that has been achieved, although discretely, by the specialization and upgrading courses has not only a social aspect but also a political one, such as introduction of alternative forms of education that would lead to a democratization of technical and scientific knowledge. These courses are concrete experiences that give power to the creation of an open university, that lead to a review of

legislation and education norms, and also promote tele-education as an educational medium and for society in general.

Modes of Distance Education Developed in Brazil

Distance education in Brazil is effected by three main modalities: by multimedia transmitted mainly by radio and television channels, in which graphic material is used as a complement; by correspondence, in which graphic material may or may not be related to other resources and the teacher-student relationship is maintained through postal service; and, the semi-indirect or semi-direct, a strategy that intercalates periods of distance education with pedagogical meetings in which the student him/herself obtains the instructional material in the institution (Zentgraf, 1987).

With the objective of circumventing the limitations of an impersonal education, without dialogue, today in Brazil, people are trying to integrate elements of interpersonal communication into distance communication. In order to do so bi-directional communication through the use of telephone, tapes, tutorials, and so on is substituted for unidirectional teacher-student communication. Pedagogical meetings, organized reception, and group studies integrate individual and collective activities. It is important to emphasize that although correspondence education through tele-education is a mode valued throughout the world, the institutions that work with distance education in Brazil, mainly with specialization and upgrading courses, prefer the semi-indirect modality. Furthermore, although sophisticated means are offered by educational technology, a text in the form of modules linked to books is still the principal means of student-teacher communication. In specialization and upgrading courses, it is common to use only study guides, books, and specialized literature. In relation to evaluation of learning, in Brazil, as in many other countries that make use of distance education, there are many controversies. It is still a challenge to establish a performance evaluation process that, without decreasing the free expression of the student, would improve the credibility of the course. The main challenge, however, continues to be the programmatic content that is presented in an identical form to all the users, which leads to a mass scale effect and, thus, makes student participation in the production of knowledge difficult (Zentgraf, 1989).

The challenges, however, can be overcome. In this sense, the Brazilian Association of Educational Technology (ABT) and the Educational Center of Niterói (CEN) have published reports and detailed statements of their respective works in conjunction with specialization and upgrading distance courses. Oliveira and Magalhaes' work "Distance Graduation, A Viable Alternative" is a real contribution for those who wish to improve their knowledge of the theme. It is the final report of POSTGRAD, a course carried out by ABT/CAPES. In turn, the Educational Center of Niterói has just published the book "Distance Education," under the coordination of Roberto Ballalai, the first part of which reports all experience of CEN in past courses using tele-education. Distance education by correspondence and the semi-direct mode, which are of

particular importance for this study, are different in some aspects. Education by correspondence has the following characteristics (Crispel, 1977; Oliveira & Magalhaes, 1985):

- individualized teacher-student communication and vice-versa is mainly done by post, as is the delivery of the study material selected or prepared by the teacher
- study material is basically made up of books and texts, accompanied by a study guide for the student
- the student mails the course activities and exams to the teacher, who, in turn, corrects them and mails them back with comments, giving the student alternative work until the student masters the subject
- at the end of the course, there is an examination supervised directly or indirectly by the educational institution
- the activity schedules are flexible, but there are deadlines
- the courses are generally of national scope
- meetings between teachers and students of the same region are organized. Apart from these meetings, some institutions have itinerant teachers who periodically visit students in their cities. This last procedure is adopted in distance courses developed by the Anglo-American School. However, they are not for higher education, which is the subject of this present study.

The semi-indirect courses have the following characteristics (Silva, 1985; Zentgraf, 1987):

- communication between the teacher and the student is carried out during compulsory "pedagogical meetings," which make up 1/4 of the total course load, generally distributed in three week-long sessions, one at the beginning, one or two at the middle, and one at the end
- the study material, which is generally prepared by the teacher and complemented by books and periodicals is given to the student in the educational institution
- the institution ensures teachers and educational supervisors are available to the students at pre-arranged times
- before receiving the study material, the student writes an exam (pre- test) that has the objective of preventing him/her from studying areas that she/he already knows. When the study material is covered, the student writes another exam (post-test) that is given an opinion or mark
- the dates of the beginning and end of the courses and of the pedagogical meetings are strict. The deadlines for studying the material and the practical activities, however, are more flexible
- generally the courses are of state and regional scope. Both the correspondence and semi-indirect courses require an infrastructure support as well as tutors and teachers specialized in many different areas of knowledge.

The Position of Specialists in Distance Education and Higher Education Supervision in Relation to Distance Specialization and Upgrading Courses

Although they struggle with many difficulties, specialization and upgrading distance courses are now a reality in Brazil. What kind of contribution can professionals that act in this area make in the sense of improving their quality and increasing their credibility? To find out the position of the professionals, Zentgraf (1988) consulted 15 specialists. Firstly, however, a survey of 32 coordinators of specialization courses from Rio de Janeiro State University (UERJ) was made to explore their receptivity to distance education. Only 23 of them answered the inquiry, of whom 12 were favourable to tele-education. Of these 12, 11 were from the human sciences [social sciences] and only one from biomedical sciences. Among the 11 that were opposed to distance education, 9 were from technological and biomedical sciences and 2 from human sciences.

Through personal statements, it was found that the main causes of non-viability for distance education courses are the practical activities directed by teachers, exclusive in some courses and predominant in others.

In the case of theoretical courses or when the practical section is not synchronized with the theoretical, co-ordinators allow distance courses in the semi-indirect modality. In the first case, they accept in fact any modality without restrictions.

The consultation with specialists in distance education and supervision had as its objective collecting information about their opinions in relation to structural procedures, functioning, and supervision of CEA at a distance, which contribute to its quality and give credibility to it in the educational system, in the academic community, and among users. Among the eight distance education specialists heard in the consultation, four belong to the Brazilian Association of Technological Education, and the other four belong to Educational Center Niterói. As for the supervisors, five were educational supervisors from higher education working in Rio de Janeiro State, two were technicians in educational subjects from the regional office of the Ministry of Education and Culture (MEC).

The detailed consultation questionnaire was prepared from 10 basic questions:

- In the actual Brazilian socio-economic-educational context, is developing distance education programs in conventional teaching institutions recommended, or should specific institutions for this kind of education be created?
- Should the initiatives for distance specialization and upgrading courses (CEADs) come from the customers (enterprises that request), from the educational institution, or from the users (students and professionals)?
- What is the geographic area that CEADs should reach?
- Which knowledge areas should be supported by the CEADs?

- In which situations is it better to use distance education through correspondence, and when is it more convenient to develop courses through the semi-indirect modality?
- What procedures should the CEAD adopt to attend to the needs of the job market and the clients' expectations?
- What procedures should be used to select better didactic material for the courses?
- What internal planning, monitoring, and evaluation directions and procedures should the educational institution establish to increase the quality and credibility of the CEADs?
- How should student performance evaluations be managed, during the course and at the end?
- What policy and directions should the educational system adopt in relation to the CEAD supervision, to improve the quality and credibility of these courses, without losing the dynamism and flexibility that characterize them?

The opinions of the majority of the specialists in distance education and supervision in the higher education system and the divergent opinions of the respondents are presented below. The results are grouped according to the 10 basic questions.

- In the actual Brazilian social-economic-educational context, the CEAD should be structured and organized as the responsibility of the sectors exclusively dedicated to distance education located at the higher education institutions (IES); the CEADs, constituted of "lato sensu" graduate courses with defined objectives, should find adequate space for development and expansion in the IES.
- The CEAD should preferably be implemented at the request of the user enterprise, and it should be offered to any client with the necessary pre-requisites. However, it should give priority to those who are unable to attend conventional courses.
- There is a divergence of opinion between distance education specialists and higher education supervisors in relation to the extent of the CEADs; the specialists consider that these courses should support job market needs from the municipal to the national level; the supervisors did not reach a common position on this matter.
- The CEADs now have better resources to support human sciences education. The distance education specialists and supervisors agreed with the CEA coordinators from UERJ, whose position was cited above.
- The distance education specialists accept two educational methods: correspondence and semi-indirect. Among the supervisors there was a consensus regarding the semi-indirect modality. The CEADs, whether in the semi-indirect or in the correspondence modality, should offer opportunities for regular pedagogical meetings (student-teacher).
- To combine the clients' expectations with the needs of the job market, the CEADs should be programmed to offer the student required and elective study areas, with discussions taking place during the phase of planning the courses.
- Concerning the instructional material to be utilized in the CEADs, the opinion of the majority of the group favoured the using of books and periodicals, supported by basic

texts, recommended activities, and study guides organized by the teachers. So far as graduate courses are concerned, the use of instructional material created by the teacher should be limited to specific situations where published materials on the topic do not exist or where it is not possible to acquire materials or when the client's needs are urgent.

- With the objective of improving the quality and credibility of the CEADs, both groups consulted agreed that the educational institutions should establish the following planning, monitoring, and internal evaluation procedures: – to create integrated pedagogical groups made up of teachers who specialize in the study area and technical- pedagogical management, detaching the specialists in educational technology, in order to develop together procedures and mechanisms for course planning and delivery that can be coordinated and evaluated effectively. Among the many duties of these groups during the planning phase are the design of a curricular proposal; methodological directives; selection of ways of attendance and evaluation of courses; integrated preparation of the plans of teaching; the organization of study guides and evaluation modalities. In the delivery phase, diagnosis and solutions for pedagogical problems; facilitating teacher and student interaction (technical-pedagogical management); organization of pedagogical meetings; organization of teachers' meetings; the establishment of an evaluation system for course and student performance.
- to constitute a management group in order to develop, monitor, and evaluate planning and administrative procedures and mechanisms. Among the administrative group's functions in the planning phase are organization of financial administration and of ways of receiving and sending mail. In the execution phase, diagnosis and solutions for administrative problems, communication with the pedagogical group concerning students' withdrawals and noncompliance with deadlines; delivery of the activities and exams to the teachers of the correspondence courses; convocation of students for pedagogical meetings and preparation of the physical environment for the meetings.
- to institute general guidelines for the courses, such as minimum qualifications for the teachers; criteria for equivalence between distance education studies and time load of conventional courses; minimum frequency requirement for the meetings; definition of a minimum progress to pass the course; establishment of the maximum duration of the course; registration and documentation procedures; conditions for the preliminary circulation of course proposals.
- Opinions are divergent concerning the evaluation of students' performance in terms of application and marking methodology for tests and exams. One group considers this task to be entirely the teachers' responsibility. Another group, which has no consensus on the question, believes that multiple choice tests with answer keys can be applied and marked by anyone in the pedagogical group.
- Concerning the quality and credibility of the CEADs, the specialists in distance education and supervisors of the higher education system agreed on one point: the evaluation of courses should not occur only where there are accusations of irregularities (except for one specialist who maintained that position). The supervisors consider that monitoring and

evaluation should occur throughout the program; however, most were of the opinion that it will be necessary to train specialists in higher education supervision to act as supervisors of distance education. The distance education specialists did not reach an agreement on the system supervision procedures. There are differing opinions about which professionals would constitute the technical pedagogical management group in institutions that administer CEADs, but there is a consensus on the relationship of educational technicians. However, many of the procedures for planning, monitoring, and evaluation of CEADs listed by the group were related to traditional working areas of supervisors and educational administrators.

The personal statements reflect considerable insight into distance education questions, especially supervision problems. Sometimes these statements support the group opinion; other times, they justify divergent opinions related to the matter.

Thus, regarding the institutions that control the CEADs:

In special cases of biomedical and technological areas, it could be advantageous to develop CEADs in institutions that are not necessarily those of higher education.

If the IES does not have the capacity to manage a CEAD, it should not promote it, nor be in charge of the pedagogical area. I believe this would not give results.

Since this researcher characterizes the CEADs as "lato sensu" graduate courses, they must involve a higher education institution.

Regarding the question of initiating CEAD programming:

In the case of courses programmed as a result of enterprise requests, the courses quickly meet the clients' needs. In the case of courses initiated by the educational institutions, other kinds of social pressure is needed in the sense of alerting the clientele to changes that are necessary or that are already happening.

Although the majority of distance education specialists favoured national level courses, it is important to emphasize the following group statement:

In the case of semi-indirect education, the larger the "geographical" level, the greater the work and the greater the need for more alternative instructional materials to be offered. This would require more preparation time and more costs and would mean more difficult supervision, and so on.

As I consider pre-diagnosis a basic step and because it is difficult to carry these out in the institutions, I believe that we should start at smaller levels and only after that, if possible, reach out to a national level.

About the choice of distance course modalities, the following statements are very illustrative:

Everything will depend on the client characteristics, on the higher or lower geographic concentration, on course objectives, and on available financial resources. Therefore, everything will depend on the CEAD's infrastructures. Rigid principles do not work.

The contact with the teacher through meetings, seminars, interviews or through any other form, even if short, is always rich, allowing easy exchange and filling of the gaps in the students' learning process.

Regarding the knowledge areas to be considered:

In some aspects of the human sciences as well as technological and biomedical sciences, it is necessary to develop strategies to complete the laboratory part of the course. The programming is more difficult in the biomedical sciences in cases that involve specific instrumental and experimental practices.

Regarding the groups that will work in the CEADs:

Professional educators conscious of the different nature of distance education; professionals from communication sciences.

Communication specialists in material production and in educational evaluation.

I attribute higher value to teachers who specialize in the study areas and to educational technicians, giving priority to the content and form and then designing the administration.

CEADs promote activities characterized by interdisciplinary groups including technicians acting in different areas.

Regarding the instructional material to be used in the CEADs:

In graduate courses the best way is the study guide; between a text of Kant's, with readings, interpretation, and orientation, and a text about Kant, I prefer the former at this course level.

Regarding the student performance evaluation:

The evaluation is the teacher's responsibility; I do not separate teaching from evaluation, either before or after.

"Applying" and "marking" pre- and post-tests are activities that do not necessarily need to be an exclusive task of the pedagogical group; other individuals, even from the administrative group, could do so, using an answer key.

Regarding the question of deadline flexibility in correspondence education, a CEAD manager expresses himself in this way:

It cannot be generalized that correspondence course activity schedules are flexible enough. Experience has shown that it is advisable to respect the schedule of the course in a way that shows the students the beginning, middle and end of the material, which certainly contributes to maintaining their motivation. Within the deadlines there is allowance for the students' own rhythm, making it possible to harmonize work and studying time. A stable rhythm of dedication to the course within deadlines is very important. Without deadlines, however, financial planning is not practical, nor is the permanence of teachers in the system.

One of the weak points in the process of distance education is administration. It is important to emphasize the following statement:

The good performance of the administrative group is of fundamental importance for the success of the work. Excellent instructional material could have its effects damaged if the administrative scheme is full of gaps.

Regarding the assistance the pedagogical group ought to give to the teachers:

Much more frequently than expected, the technology specialists not only help but are also the ones responsible in the semi-indirect system for the format of the material in relation to curricular contents.

Regarding the importance of the supervision of the distribution of study materials, which is a crucial point in distance education:

The programming of schedules for distribution of the pedagogical materials should be done under the supervision of the pedagogical group, especially when there are a great number of distance education centres far from the institution responsible for the course. When trying to solve practical problems and speed up the distribution process, serious problems could be generated for the individual education technique.

Regarding the teacher qualification for the CEADs:

The specialist degree could substitute for the master's once the technical professional experience in the area is demonstrated, especially in the technological biomedical areas; and in the case of those having a master's degree, once they have experience in the course area.

Regarding the question of equivalence hour/classroom:

To establish criteria of equivalence of the hour/classroom concept in the CEADs, it is essential that the teachers balance activities and content and that the CEADs have an equivalence of at least 360 hour/class.

It is evident that the problem of supervision by the official system through monitoring and evaluation of teaching is one of the aspects that presented the greatest divergence. To a certain extent, this confirms the position found in the technical literature on this matter. It is opportune to cite the following statements:

I believe evaluating courses after completion cannot guarantee many things. It would be ideal for the monitoring and evaluation to be carried out while the course is taking place. However, our experience indicates that such evaluation is only promoted in experimental terms and it is mostly directed to accomplishing formal requirements.

A course evaluation "a posteriori" is only for scientific reason or for future revision.

The CEAD evaluation has to come from the students; an official intervention is only justified by irregularities.

Evaluation by sampling together with the IES only in cases where it is totally impossible to have an alternative procedure.

There are not sufficient human resources to implement supervision by the educational system in the actual context does not have the human resources to guarantee the educational quality of the CEADs.

Regarding the CEAD supervision, the following statements are important:

I think that (a) what is to be supervised and (b) what concept of supervision is to be used should be carefully discussed.

The educational technician (TAE) could probably take care of registration with greater or lesser success. To give assessments, the technicians should take a specialization course on non-formal education, including the existing technologies.

There is a different form of supervision being carried out by means of opinion research and others. Surveys are, if not the only means, at least an auxiliary tool for giving objectivity to the supervision.

However, the TAEs, who are not a homogeneous group, should have specific training and should be able to execute parts (but not all) of the supervision. There probably ought to be groups composed of "legalist" TAEs, who do not need training, of TAEs "technologists," who need training, and of TAEs "researchers," who may or may not need to be trained. The last one should also be able to perform reasonable pedagogical assessment and monitoring supervision.

In summary, the position of specialists on distance education and on supervision of the higher education system answers questions related to the CEADs' structure and functioning. Furthermore, it represents an effective contribution to establishing procedures and mechanisms for monitoring and evaluation at an internal institutional level. However, some maturity is necessary. This is the case for the geographic reach of the course, the evaluation system, the duration of the courses, and, the working group composition.

Regarding supervision at the external level, there is a common feeling that it is necessary to establish a supervision process that promotes credibility and quality for the CEADs. However, there is no consensus regarding the direction and procedures to be adopted. It is also important to emphasize the supervisors' position that there is a need to prepare human resources to act in specific areas of supervision of distance courses.

Conclusion

The evidence shown in the specialization and upgrading distance courses cited in this work, the studies carried out by institutions that are dedicated to this educational modality, and the opinion that has been presented in the Federal Council of Education make it possible to affirm that the use of this strategy is highly positive in the Brazilian case.

However, it is essential to give the specialization and upgrading distance courses directions and procedures that contribute to their quality and credibility. In this sense, Zentgraf's (1988) consultation with the best professionals in the area makes it possible to make some recommendations.

Firstly, at the internal level of the institutions, planning, execution, and evaluation of these courses will have to be directed to specific characteristics of distance education pointed out by the specialists consulted.

Secondly, at the external level, the educational system also has to be responsible for establishing directions and norms for the specifics of teleeducation, without which graduate distance courses in Brazil would never achieve credibility.

Regarding the monitoring of the course evaluations, the issue of the supervision of teaching is emphasized, which is accepted by some as an instrument for credibility and rejected by others as a mechanism that inhibits creativity. This problem implies the need to produce supervisors with

specific knowledge in tele-education. It also suggests that institutions that train educational supervisors should include, in their first courses, knowledge that will make those professionals able to exercise functions related to distance education.

Finally, this is an opportunity to emphasize the role the university could play through training human resources to act in the areas of educational technology and development of research into such questions as: methodology of distance education and its operation; evaluation of practical experience; diagnosis of needs related to the job market; performance of those who attend distance education; experiments with distance courses in problematic areas such as mathematics; experiences of distance education in other countries; and many other aspects that could facilitate distance education development in Brazil.

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