The secondary school – university transition: Orienting first-year students

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Abstract
This study analyses the processes of transition from secondary education to the university, and specifically the induction and orientation of students in their first year of university. The field study performed at the Universitat Autònoma de Barcelona (UAB) primarily compiles the opinions of institutional leaders, students in their first year, students in secondary education and student organisations. Likewise, documentation on promotional practices, orientation and mentoring of students in their first year at Spanish and foreign universities is also examined.

The results reveal a variety of actions aimed at recruiting and orienting students, but there are few links with the processes of mentoring and orientation aimed at the same group. In any event, these are structural measures that do not always fit in with the difficulties that students encounter or with their concerns, perceptions and expectations.

General area of interest of this innovation
The university must constantly adapt itself to a society in constant change, which means structural and operational changes in the ways of teaching and managing. Therefore, there is a rising interest in universities to welcome, orient and care for their students by providing them with orientation and assistance when they are in their first few years of their degree programme, as well as supporting them in their transition to the working world. All of these actions reinforce the centrality of students and the teaching and learning process that must be promoted as the driving forces of university activity.

However, we should also bear in mind that high quality education requires organised transition processes that enable students to overcome the difficulties they find in
the educational process, and facilitating the best coordination possible among all the stakeholders involved.

In this context, studying how to make it possible for this transition to be a gradual process is particularly timely because:

1. The student population is increasingly heterogeneous due to the diversification of the routes leading to the university, as well as cultural diversity, prior professional experiences, the transversal skills they might have, etc. Letting students socialise freely is not the best way to meet their needs.

2. Students’ social and academic integration into the university culture is a key factor for their educational success. The students who feel academically integrated have better chances of finishing their degrees and earning higher marks (Tam, 2002), and those who are more satisfied have higher chances of recommending the institution to future students (Delaney, 2004).

3. It has positive repercussions on students’ self-esteem, academic performance and socialisation processes, while it also helps to prevent the delay and abandonment of studies, which negatively affect the processes of institutional evaluation.

All of these reasons justify a steadfast commitment to effective student recruitment strategies, especially in secondary education, as well as to conducting welcome or induction programmes for students in their first year which facilitate a smoother transition process to their university degree programmes.

The study that has been conducted (project MQD 2004 from the Department of Universities) analyses the process of transition and induction of students coming from secondary education into the university. The document presented below compiles the main methodological factors, a summary of the results and the most relevant conclusions reached.

1. Objectives

1. To analyse the experience of the transition from secondary education to the university at the UAB and other institutions.

2. To assess the impact of transition actions at the UAB and to analyse the conditions that affect these results.

3. To draw up a transition and orientation plan for students from secondary education starting their university degrees.

2. Description of the project

Tending to students, with the goal of achieving a complete, effective adaptation to the new educational situation, requires us to pay attention to the connection with secondary school and the support and orientation they have available in their first year at the university, a factor which this article analyses by surveying the known experiences.
The transition process from secondary school to university, just like all the educational transition processes, is difficult in that it means a change in rules and in the orientation of the education, which affects students’ academic and social lives.

Despite the fact that the shift between the two educational phases has always existed (Quinquer, 2004), it is perhaps more complex now given the multiplicity of studies available at the university, the non-preparatory nature of the baccalaureate programmes, the problems of a connection between the contents of the courses in each stage, the lack of fit between the knowledge that university students need and what they really have, the change in the educational contract and especially the impact of shifting from one stage of education to another.

The transition should be viewed as an opportunity for students, who must be capable of taking advantage of the support offered them, and for the institution, in that it requires its constant adaptation in view of the changing educational reality of students’ profiles, interests, expectations and needs.

3. Methodology
The working methodology and specific actions undertaken can be grouped into three major sections around which the study was organised:

1. **Phase 1. Analysis of existent experiences:** International and UAB experiences were surveyed by analysing reports, websites, articles, memos and interviews with organisers and users, using a matrix that gathered the information regarded as relevant as well as the sources of this information.

   The instruments applied to the key informants at the UAB, validated by internal and external comparison, were:

   a) **Questionnaire for students in their fist year.** This includes questions like their participation in different promotional and orientation activities, the most useful activities in their transition process, how these actions helped them to decide to study at the university, the changes they have experienced at the university compared to secondary school, the difficulties in their programmes and the support and resources they would like to have.

   b) **Guided interview of heads of students at centres and faculties.** This includes general questions eliciting information on how the centre promotes and orients, evaluations of the actions, problems and knowledge of certain university programmes (student advisors, Argó, etc.).

   c) **Interview script for student groups:** This asks a variety of questions on their promotional process and orientation plans for each faculty.

   d) **Script for the student advisor discussion group,** focusing on the decision to choose the university, the information received prior to entering the university, the changes they have experienced at the university compared to secondary school, the institutional support they are aware of, etc.
e) Questionnaire for students in the Argó Programme (UAB – secondary schools). The questions were related to the reasons they decided to choose the university, the degree they plan to pursue, the support they have received in the transition process, their participation in stays at the UAB, their participation in the Argó Programme and the support they would like to have as they embark on their higher education.

A total of 263 questionnaires were administered to students from 14 faculties, plus we held 31 student advisor interviews, two interviews with representatives of student associations, ten interviews with students in the Argó Programme, one discussion group with five students from their first year, and 18 interviews with institutional leaders (Office of the Vice Rector for Student Affairs, Head of Academic Affairs, Head of Promotion and Communication, the Vice Deans of Academic Regulations, Students and Degree Coordinators). The field study enabled us to draw up a map of institutional actions at the UAB.

The analysis of the experiences outside the UAB included: identifying the most prestigious universities in the international context based on the Shanghai index, delimiting the factors to be analysed based on the information matrix and culling the student transition and recruitment activities on the websites of the different universities.

2. Phase 2. Delimitation and analysis of significant experiences: A variety of experiences were chosen according to the following criteria: they opened up new pathways for dealing with the transition, they were consolidated and had been in place for several years, they had been evaluated and there was proof of their importance for the issue being studied, they were accessible for offering information, and they had the participation of their leaders. The experiences were: the Dona Programme at the Universitat Politècnica de Catalunya; the Argó Programme, the Campus Ítaca and the student advisor programme at the UAB; and student retention programmes at a variety of universities.

3. Phase 3: Proposed plan for the transition and orientation of students at the UAB. The proposed plan for the transition and orientation of students at the UAB outlines the goals, actions and strategies to be borne in mind when orienting students in their first year. Its contents were the result of analysing the information of the experiences compiled as well as the assessments by the stakeholders involved and the researchers themselves.

4. Results
The map of institutional actions that are conducted at the UAB distinguishes the actions addressed at reinforcing the secondary school-university connection, those aimed at recruitment and information, and those related to student orientation. All the centres and faculties participate in these institutional actions (Table 1).
Table 1. Map of UAB actions

**Actions aimed at students in secondary school and at reinforcing the secondary school-university ties**

**Campus Ítaca:** This is a social-educational programme whose goals are: to encourage students to continue studying after compulsory secondary education; to create a space of coexistence between students from diverse social backgrounds; and to encourage the use of Catalan as the language of communication.


**Argó Programme:** Its goal is to forge closer ties with secondary education. To do so, it conducts a variety of actions such as advice on research projects in baccalaureate, stays at the UAB by students in baccalaureate programmes, and prizes for research studies.

**Other:** Maths Saturdays, Physics Saturdays, Science Week and the «Camí de les lletres».

**Actions aimed at recruitment and information**

**Open House days and campus visits.**

**Family Day:** The purpose of these three activities is for students to visit the UAB Campus, either in the company of their classmates and teachers or for a weekend with their family.

Participation in the «Saló de l’Ensenyament» educational fair and other fairs.

**The UAB visits you:** Informative talks on demand at secondary schools and town halls (fairs are also held at the UAB about the second cycle degree programmes offered).

**The UAB bus** travels around different towns and cities in Catalonia with the goal of bringing information to the public.

**Website of future students:** This includes academic information, info on the services offered by the UAB, on the campus, FAQs, email addresses for answering queries, etc. The centres and faculties of the UAB also have their own website.

**Promotional Video** produced by the UAB’s Communication Services, as well as informative brochures and other materials.

**Actions aimed at orienting UAB students**

**Welcome and Orientation Days:** Informative talks in the different educational centres on the degree programmes, registration, etc. just prior to registering or during the first few days of class.

**Preparation courses** for the degree programmes for new students.

**Students website:** This contains a variety of useful information such as the student guide, FAQs on the European Higher Education Area, the practical admissions guide, information on housing, a link to «study support» (website of the Unit of Teaching Innovation in Higher Education), etc.

**«La Xarxa»:** The website for students with information on the students centre, forums, support services, etc.

**Psychopedagogical Advice Unit (UAP):** Students may use this unit should they need psychological or educational support. It also organises «Learning Strategies» courses that count for elective credits.

**Student Advisor Programme:** Students in the last year of their degree programmes guide and support first-year students. This counts for elective credits.

**Language orientation** for foreign students (Erasmus).

In addition to the institutional actions conducted by the UAB itself, there are centres and faculties that also organise other supplementary promotional and orientation actions (Table 2):
Table 2. Promotion and orientation actions at the UAB

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Promotion Actions</th>
<th>Orientation actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sciences</td>
<td>“Physics Saturdays”</td>
<td>“UAB Physics Fair”</td>
</tr>
<tr>
<td></td>
<td>“Mathematics Saturdays”</td>
<td>UAB – Secondary school biweekly encounters (Mathematics)</td>
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<tr>
<td></td>
<td>International Mathematics Olympics</td>
<td></td>
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<tr>
<td>Communications Studies</td>
<td>Family Day</td>
<td>Orientation day</td>
</tr>
<tr>
<td>Economics and Business</td>
<td>Visits to town halls to tell about degree programmes</td>
<td>Preparatory courses</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td>Between-term week</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questionnaires to students in first year to get to know their profile</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reinforcement Thursdays at 12 noon and 6 pm</td>
</tr>
<tr>
<td>Education</td>
<td>Visits to town halls to tell about degree programmes</td>
<td>Orientation plan</td>
</tr>
<tr>
<td></td>
<td>«El camí de les lletres»</td>
<td>Degree workshops</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mentors in all degree programmes</td>
</tr>
<tr>
<td>Law (Labour Relations and Labour)</td>
<td>Mock trials</td>
<td>Course on introduction to law</td>
</tr>
<tr>
<td></td>
<td>Family Day</td>
<td>“Improving learning in first-year students” programme(Laboral Relations, academic year 2000-01)</td>
</tr>
<tr>
<td></td>
<td>Visits to town halls to tell about degree programmes</td>
<td>Talks by other students (Labour Relations and Labour)</td>
</tr>
<tr>
<td>Philosophy and Letters</td>
<td>Family Day</td>
<td>Innovation project for first-year students (Geography, academic year 1998-99)</td>
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<td></td>
<td>Visits to town halls to tell about degree programmes</td>
<td>Orientation week</td>
</tr>
<tr>
<td>Psychology</td>
<td>Advertising programme on degree programmes and curricula</td>
<td>Preparatory courses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Orientation plan for first-year students.</td>
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<tr>
<td>Translation and Interpreting</td>
<td>Visits to town halls to tell about degree programmes</td>
<td>Getting to know the courses</td>
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<tr>
<td></td>
<td>Family Day</td>
<td>Language testing</td>
</tr>
<tr>
<td></td>
<td>CD promoting the faculty</td>
<td>Self-registration tutorial and mentoring for first-year students</td>
</tr>
<tr>
<td></td>
<td>«El camí de les lletres»</td>
<td>Orientation week</td>
</tr>
<tr>
<td>Veterinary Sciences</td>
<td>Attention to families</td>
<td>Questionnaires to students in first year to get to know their profile</td>
</tr>
<tr>
<td></td>
<td>Mentoring sessions with families</td>
<td>Personalised mentoring</td>
</tr>
<tr>
<td></td>
<td>Family Day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>County-wide and local fairs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Visits to town halls, county councils and provincial councils to tell about degree programmes</td>
<td></td>
</tr>
<tr>
<td>Business School (Sabadell)</td>
<td>Open classrooms</td>
<td>Orientation plan for first-year students.</td>
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<tr>
<td></td>
<td>Open book presentations</td>
<td>Talks at the start of the academic year</td>
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<tr>
<td></td>
<td>Open summer course</td>
<td>Mentoring plan</td>
</tr>
<tr>
<td></td>
<td>Weekly radio programme</td>
<td></td>
</tr>
<tr>
<td>Higher School of Engineering</td>
<td>Visits to town halls and secondary schools to tell about degree programmes</td>
<td>Preparatory courses</td>
</tr>
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Beyond the planned actions, the institutional heads of 50% of the centres participating in the study said that they have a mentoring or orientation plan or other documents and materials that they use to organise student orientation and mentoring.

In terms of the problems that the centres and faculties believe should be addressed via mentoring, which are not done or are not done in a satisfactory way, they can mainly be grouped into three major areas:

- Mentoring: problems derived from professors’ work situation and the organising into terms which affect the organisation of the integrated Mentoring, the equitable assignment of mentoring sessions, the scant influence of mentoring in the first year and the lack of professors who want to serve as mentors.
- Teaching – study. Problems derived from absenteeism, student overcrowding in the classrooms, quitting school because of low academic performance and other problems derived from the limited views of the profession itself.
- Resources: which affect, for example, the drawing up of an orientation plan or having a higher number of student advisors.

With regard to first-year students’ participation in and satisfaction with the promotion, orientation and transition actions, Table 3 gathers the most significant results. We should point out that there are more women in the sample (60%) than men, and more students between the ages of 18 (52%) and 19 years old (22%), as well as students in psychology (27%), economics (19%), computer engineering (19%), medicine (14%) and foreign languages (13%).

The open-ended questions enabled us to learn that the mentoring and transition to university activities that were the most useful for the students were related to orientation and offering useful, personalised and direct information and knowledge on the degree programmes and how the faculties and university at large work. This information was received at the «Saló de l’Ensenyament» educational fair and other local fairs, in the informative brochures, at visits to the university and informative talks and sessions held at secondary schools and town halls. Oftentimes these actions helped the students decide which degree to pursue. Other services and programmes that helped first-year students considerably were: orientation and reception days and plans, the preparatory courses that introduce students to the degree, and the library services for documentary sources and for having appropriate study venues.
Despite everything that has been achieved in terms of information and orientation, there is not enough to have successfully overcome the main challenges and changes that students encounter when entering the university in terms of their studies and the role they must play. Therefore, they believe that the programmes are extremely demanding and that they must study more often; by the same token, students also have greater freedom, individuality and responsibility, although the relations with the professors are at times distant or even nonexistent.

The students also encounter difficulties studying, as they claim to have little time to study and complete the assignments from the courses. They ask for a different timetable organisation that would enable them to do projects involving continuous assessment, once supplied with all the knowledge they need on the project requirements. They also ask for the final exams to count less and to ensure that project deadlines and final exams do not accumulate in the months of January and June.

Some contributions for improving the process include: spending more effort on explaining more broadly how the registration processes work, the profile and professional opportunities of the degree programmes and in general the university in the guise of presentations, campus visits and talks at secondary schools. The preparatory courses, zero classes and reinforcement classes, the workshops prior to the start of the academic year and the orientation and welcome plans are actions that contribute effectively to academic success during the first year.

The interviews conducted with institutional leaders, student associations, student advisors, secondary school students and the student discussion group revealed that:

### Table 3. Participation and evaluation of specific actions

<table>
<thead>
<tr>
<th>Actions</th>
<th>% participation</th>
<th>% assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open House days</td>
<td>50%</td>
<td>1 7 34 40 18</td>
</tr>
<tr>
<td>UAB visits to secondary schools</td>
<td>23%</td>
<td>6 5 39 35 15</td>
</tr>
<tr>
<td>Family Day or other visits to the campus</td>
<td>7.5%</td>
<td>- 9 37 27 27</td>
</tr>
<tr>
<td>«Saló de l’ensenyament» education fair</td>
<td>49%</td>
<td>2 10 26 36 26</td>
</tr>
<tr>
<td>Website</td>
<td>80%</td>
<td>1 5 24 48 22</td>
</tr>
<tr>
<td>Individualised sessions</td>
<td>7%</td>
<td>11 37 21 26 5</td>
</tr>
<tr>
<td>Informative brochures</td>
<td>59.5%</td>
<td>1 12 38.5 38.5 10</td>
</tr>
<tr>
<td>Informative talks and sessions (town halls, etc.)</td>
<td>32%</td>
<td>5 7 25 44 19</td>
</tr>
<tr>
<td>Welcome Days</td>
<td>60%</td>
<td>1 10 37 34 18</td>
</tr>
<tr>
<td>Orientation Days</td>
<td>52.5%</td>
<td>3 15 32 35 15</td>
</tr>
<tr>
<td>Student advisors</td>
<td>22.5%</td>
<td>11 12 31 28 18</td>
</tr>
<tr>
<td>Individual mentoring</td>
<td>10%</td>
<td>10 7 38 24 21</td>
</tr>
<tr>
<td>Preparatory courses</td>
<td>20%</td>
<td>- 8 20 41 31</td>
</tr>
<tr>
<td>Other</td>
<td>2.5%</td>
<td>- - 14 57 29</td>
</tr>
</tbody>
</table>


The mentoring actions that are considered the most relevant are the information provided by other students, the student advisor programme, integrated and personalised mentoring and informative talks on the degree programmes.

One priority needing to be addressed is expanding the functions of the teachers with the inclusion of mentoring and the fact that the integrating mentoring is not counted in the academic record, as well as how these mentoring sessions are practically organised.

The Argó Programme, the Campus Ítaca and the student advisor programme are all considered positive, worthwhile and satisfactory experiences that help to orient first-year students.

Actions worth promoting include: timetable flexibility for combining studying and work, more time spent on mentoring, lowering student-professor ratios, improving information on the EHEA, increasing guidance in the registration processes and holding individualised mentoring sessions.

The institutional support needed to overcome the difficulties outlined points towards mentoring, promoting orientation and making the faculty more accessible.

The analysis of experiences outside the UAB, focusing on a selection of the 15 best universities in the world (Academic Ranking of World Universities, 2004), shows that:

- With regard to promoting the university at secondary schools, all of these outstanding institutions host visits by families and open house days, they participate in educational fairs, they have virtual tours, they make presentations at secondary schools, they offer talks at the university and informative actions on the entrance exams. They also have materials for dissemination (guides, videos, radio and website) and have multidisciplinary teams that perform the functions of orientation and educational-psychological guidance for students.
- With regard to the orientation actions at the university, they all hold informative actions on entrance exams, pre-registration, registration, the range of degree programmes available, grants and scholarships and services; they also hold personalised mentoring, self-orientation, virtual forums and have student advisors. At the same time they offer study support by means of training in study techniques.

All of these results have helped us to devise a Proposed plan for the transition and orientation of students at the University. Below we highlight some aspects of this plan related to its five key phases:

- **Detecting needs.** We must identify the informational and orientation needs of potential university students, those of students in their first year and those of the degree programmes they would like to pursue or are embarking on. To this end, we must evaluate their informational, educational and orientation needs, identify the specific needs in their programmes and take into consideration and assess the degree of efficacy of the practices that are already consolidated in the different degree programmes.
• **Outlining the goals.** After the needs are identified, the priorities should be set and the realms of action must be outlined, which must be aimed at: consolidating the ties between the university and post-secondary schools with the purpose of fostering mutual knowledge, coordination and recruitment of new students; putting at the service of first-year students an orientation and induction plan that provides information on the university, the curricula, professional outlets and their services; overcoming possible difficulties with regard to study habits and strategies or the prior knowledge needed to take certain courses; training students to adapt to the new study programmes and improving their learning methods; and advising students in specific terms, diverse problems or special situations.

• **The type of mentoring actions depending on key moments in the first year.** Therefore, depending on the phase, we can include two main group: actions prior to registration at the university, and actions addressed to first-year students. They must all be closely tied to the goals and priorities set by the university, the faculty, the school and/or the degree programme.

• **Organisational factors:** Below is a list of the ones we view as indispensable:

  – Including in the institutional statements the concern for the transition and the inclusion of first-year students as a commitment that has to be planned and evaluated.
  – The existence of a policy management that is in charge of setting the criteria and priorities according to an action calendar.
  – The existence of an operational management that coordinates and executes the corresponding actions, made up of the heads of the university entrance exams, the coordinators of the degree programmes and/or of the first year and secondary school teachers.
  – A technical group that provides support for the overall planning process and participates in supervising and evaluating it by providing instruments, evaluation protocols, mechanisms and regulatory strategies.
  – Having the criteria for assigning first-year professors, reinforcing their training and the existence of a working climate that supports the coordination and success of the plan.

• **Evolution of the plan.** The design, development and results of the transition and university orientation plan must be tracked and evaluated in order to reveal the aspects that are working properly and those that need improvement. They must also serve to further organise the plan and take decisions on how to optimise it, such as: defining the profile of first-year mentor, changing the training received by the mentors or student advisors, organising meetings with the heads of curricula at the different centres, setting up mechanisms for better coordination with the professors in post-secondary schools, etc.
5. Conclusions
The actions aimed at recruiting students from secondary school, in the case of the UAB, have shown satisfactory results for their target audience. The same, however, does not hold true with the orientation actions aimed at first-year students, who ask for more attention. Some of the most salient results are:

The most useful actions for helping students successfully navigating the transition from secondary school to the university are the ones that try to inform and share information about the university.

The orientation actions, services and programmes that were most highly valued during the transition to the university were orientation sessions, welcome sessions, orientation on the degree programme, faculty and university services and preparatory courses. Also useful were mentoring, the student advisor programme, the Campus Ítaca and the computer and library services that offer guidance in the transition.

The main changes the students found compared to secondary school were that the university is more academically demanding, students are required to work independently, changes in student-professor relation and the evaluation systems used.

The main difficulties found in the transition from secondary school to the university and orientation at the university were related to personal time management, the amount of the contents in the curricula, study techniques, learning skills and evaluation systems.

Overcoming the difficulties requires more and better academic and administrative information, educational-psychological guidance, the organisation of preparatory courses, personalised attention via mentoring, more student advisors, better orientation and continuous assessment mechanisms.

The development of recruitment and orientation actions at the UAB and other benchmark universities shows the need to delve further into the processes of student adaptation and retention by reinforcing the orientation and mentoring processes both before and after students enter the university. Until now the actions conducted were more structural and basic, so we must delve further into the institutional aspects (outlining and coordinating student services) and personal facets (analysis of the shaping and development of expectations and perceptions among students).

For forthcoming studies, we believe that it would appropriate to organise specific orientation programmes for each university based on joint students that enable us to make headway in defining students and developing a list of good practices in the secondary school-university transition. It is also necessary to develop mechanisms to evaluate the effects and impact of these programmes and analyse the transition process from other routes of access, such as students over the age of 25, senior citizens, vocational education and others.
References


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Joaquín Gairín Sallán holds a doctorate in Pedagogy, is a full professor and international consultant. The consolidated research group he coordinates, EDO, has released the following publications on the subject: *El Pla de Tutoria a la Universitat* (2005 – Bellaterra, Servei de Publicacions de la UAB), «La tutoría académica en el escenario europero de educación superior» (2004 – Revista Ineruniversitaria de Formación del Profesorado, vol. 18) i «La transición como oportunidad y problema educativo» (2004 – Congreso Interuniversitario de Organización de Instituciones Educativas, Seville).

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