

## **“Sustainability of Information” as a New Subject in University Degrees in Business Management and Administration: Reporting of Non-financial Information — Spanish Case**

*María Ángela Jiménez Montañés, Susana Villaluenga de Gracia*  
(University of Castilla-La Mancha, Spain)

**Abstract:** The implementation of curricula of degree, within the framework of the European space of higher education (EEES) has been a substantial change in University learning. The student spent acquire knowledge, competencies, being considered as “an identifiable and measurable set of knowledge, attitudes, values and skills related that allow satisfactory performance in real-life situations of work, according to the standards used in the occupational area” (Van-der Hofstadt & Gómez, 2013, p. 30). More specifically, we talk about generic skills, which are the cognitive, social, emotional and ethical (initiative, effort with the quality, liability, etc.) of transferable character that constitute “knowledge be” in vocational training of the University; and specific competencies in the various degrees and disciplines, allowing to specify functions and professional profiles to form.

The degree of management and business administration, general objective is to train professionals and experts in the knowledge and use of processes, procedures, and practices employed in organizations. This overall objective implies to consider the interrelationships between the different parts of the Organization and its relationship with the environment. Studies administration and business management are aimed at learning theories, models and tools applicable to the processes of decision and management organizations. According to the book white of the title of the degree in economics and business, published by the national agency of evaluation and quality, distinguish between specific objectives in the field of knowledge and specific objectives in the field of competences and skills. Focusing on the latter, and in accordance with the Subject Benchmark Statements of General Business and Management, published by the Quality Assurance Agency for Higher Education in the United Kingdom, the specific objectives in the field of skills and abilities that we focus the work would empower the student to it raise the ethical exercise of the profession, assuming social responsibility in decision-making.

In this environment, it is necessary to consider the implementation of the 2014/95/EU Directive on disclosure of non-financial information and information on diversity of certain large companies and certain groups resulted in the publication of the Royal Decree 18/2017, of 24 November, whereby amending the commercial code, the

---

María Ángela Jiménez Montañés, Ph.D., Associate Professor of Financial Economics and Accounting, Auditing of Accounts, Accredited Accounting Expert; Faculty of Legal and Social Sciences, Castilla-La Mancha University; research areas/interests: management accounting and business administration. E-mail: [Angela.jimenez@uclm.es](mailto:Angela.jimenez@uclm.es).

Susana Villaluenga de Gracia, Ph.D., Contracted Professor, Doctor of Financial Economics and Accounting; Faculty of Legal and Social Sciences, Castilla-La Mancha University; research areas/interests: management accounting and business administration. E-mail: [Susana.Villaluenga@uclm.es](mailto:Susana.Villaluenga@uclm.es).

consolidated text of the Capital Companies Act approved by Royal Legislative Decree 1/2010 of 2 July and the law 22/2015, 20 July audit of accounts , in the field of non-financial information and diversity.

This new disclosure requirement for companies leads us to consider the need to introduce a transversal subject in the curricula of students in economics and management and business administration studies, in order to acquire the skills necessary in the European Higher Education Area (EHEA), to produce the new business reports.

**Key words:** sustanaibility; education; non-financial information

**JEL codes:** A22, M14, M41, M53

## **1. Analysis General Framework**

The implementation of curricula of degree, within the framework of the European space of higher education (EEES) has been a substantial change in University learning. The student spent acquire knowledge, competencies, being regarded as “an identifiable and measurable set of knowledge, attitudes, values and skills related that allow satisfactory operation in real-life situations of work, harmonizing to the criteria applied in the occupational area” (Van-der Hofstadt & Gomez, 2013, p. 30). More specifically, we talk about generic skills, which are the cognitive, social, emotional and ethical (initiative, effort with the quality, liability, etc.) of transferable character that make “knowledge be” in vocational preparation of the University and specific competencies in the diverse grades and disciplines, allowing to define parts and professional profiles to work.

The Degree of Management and Business Administration, the general objective is to educate masters and experts in the knowledge and the utilisation of cognitive operations, procedures, and practices used in establishments. This overall objective implies to consider the interrelationships between the different parts of the Organization and its relationship with the environment. Studies in Administration and business management are aimed at learning theories, models and tools applicable to the processes of decision and management organizations. Granting to the Book White of the Title of the Degree in Economics and Business, published by the National Agency of Evaluation and Quality, distinguish between specific objectives in the area of knowledge and specific objectives in the area of competences and skills. Concentrating on the latter, and in accordance with the Subject Benchmark Statements of General Business and Management, brought out by the Quality Assurance Agency for Higher Education in the United Kingdom, the specific objectives in the field of sciences and abilities that we concentrate the work would empower the student to it raise the ethical practice of the profession, assuming social responsibility in decision-making. It is in this scenario where we develop research, linking these specific objectives to “Sustainability”, as relevant current instruments for the development of the community and businesses.

In this environment, it is necessary to consider the implementation of the 2014/95/EU Directive<sup>1</sup> on disclosure of non-financial information and information on diversity of certain large companies and certain groups resulted in the publication of the Royal Decree 18/2017, of 24 November, whereby amending the commercial code, the consolidated text of the Capital Companies Act approved by Royal Legislative Decree 1/2010 of 2 July and the law 22/2015, 20 July audit of accounts, in the field of non-financial information and diversity. The directive involves the elaboration of information not financial status, so organizations can meet their ethical duties and morals in business performance being considered as a new instrument.

This new disclosure requirement for companies involves the development and implementation of the

---

<sup>1</sup> <https://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:32014L0095&from=ES>.

Corporate Social responsibility (CSR) more effective and efficient. This approach makes us ask ourselves the following hypotheses of the study:

H1: Degree in Administration and Business Management students are prepared for the new information challenges of organizations, under the scenario of CSR and sustainability?

H2: Is necessary to modify curricula of the Degree on Business Management and Administration?

H3: Is necessary to introduce a transversal subject in the curricula of students in economics and management and business administration studies, in order to acquire the skills needed in the European Higher Education Area (EHEA), to be able develop the new business reports?

## **2. Education in Sustainability and to Sustainability: State of “Non-Financial” Information.**

The Corporate Social responsibility (CSR)<sup>2</sup>, in general terms, can be considered as an instrument that helps to reconcile economic, social and environmental objectives, in all organizations, regardless of the field in which it developed its activities, defend common values and increase the sense of solidarity and cohesion, within the debate on globalization, competitiveness and sustainability. Consists, according to the Green Paper of the Commission of the Communities European (2001, p. 7), as “the voluntary integration, by enterprises of social and environmental concerns in their business operations and their relationships with their partners”. Since this scenario is where we can incorporate “Sustainability”.

The first inquiry, we ask would be what is meant by sustainability? It is a widely used term, simply “the sustainability refers, by definition, to the gratification of the needs of today without compromising the ability of future generations to meet theirs, guaranteeing the balance between economic growth”, care of the surroundings and social well-being. Here was born the idea of sustainable development, as that mode of progress, maintaining that delicate balance today, without compromising the resources of tomorrow”<sup>3</sup>.

The current concept of sustainability appears for the first time in the Brundtland report, issued in 1987. Also called our common future, this paper prepared for United Nations warned for the first time near the negative environmental effects of economic growth and globalization, trying to offer solutions to the problems arising from the industrialization and population increase. In this case the term, not only included the environment, but the development in its social and economic dimensions: ending poverty, equality of gender, healthy support, rural transformation, respect for human rights and the civilisation of peace production and consumption responsible, value diversity and ensure equal access to ICT.

Within this definition, three large blocks can be identified:

Environmental sustainability, which is the one that puts the spotlight on preserving biodiversity without having to give up the progress of economic and social;

Economic sustainability, which is responsible for which activities that try to balance environmental and social; it inclines to a less questioning and more solidarity-based economic system.

Social sustainability, cohesion of the population and the same stability seeking.

Targets to achieve sustainable development (DS) are set at the Earth Summit held in Brazil embodied in

---

<sup>2</sup> The concept of Corporate Social Responsibility has been analysed and studied during the last few years and from different points of view. The literature on the subject is really extend, which is why only have made reference to the concept established in the Commission’s Green Paper the European communities, as a framework where we develop our analysis.

<sup>3</sup> United Nations Conference on Environment and Development (UNCED).

Agenda 21 (1992). In this Agenda, the higher education is conceived as an instrument to solve global problems, which align themselves with the universities through different agreements: Talloires Declaration (Paris, 1990), Halifax (Canada, 1991) statement, statement of Swansea (Wales, 1993), the University Charter for sustainable development of the CRE program Copernicus (1993), a commitment to include the DS in the formation, or the Declaration of Lüneburg (1997).

In 2002 the UN passed the resolution 57/254 which proclaimed a decade of United Nations of the education for sustainable development (DESD) 2005-2014, with UNESCO as the lead agency. In 2003 UNESCO presents an International Plan, which was unveiled in 2004 to a group of high-level Advisory and submitted to the Assembly of the United Nations (New York, 2004) and the Executive Board of UNESCO (Paris, 2005). In 2006 was published this plan as a strategic document for all states, incorporating specific objectives.

In full reform, the Conference of Rectors of Spanish universities (CRUE) approves the formation of the Working Group in 2002 for environmental quality and sustainable growth. In 2005, the Executive Committee of the Working Group of environmental quality and sustainable development of the CRUE (2005) indicates the guidelines in the design and development of the curriculum content in order to “address the educational process in a holistic manner, introducing skills for sustainability transversely, that students may learn to make decisions and perform actions from sustainable criteria” (p. 2).

The Declaration of the DESD and the EHEA transformed the University educational system in the EU and introduced a new educational paradigm, which Spain assumed with the publishing of the papers of the CRUE (2005) and RD 1393/2007, of October 29, which establishes the management of the official university educations, respectively.

The educational model forced to a new conception of teaching and methodologies aimed at the active participation of the students to acquire, during the process of teaching and learning, not only knowledge but also skills, skills, attitudes and values demanded<sup>4</sup> with regard to employability<sup>5</sup>. Therefore, it is logical to guess that in a universe where knowledge is available to all, training should focus on the breeding of the individual to adjust to varying environments.

The degree of management and business administration, general objective is to train professionals and experts in the knowledge and use of processes, procedures, and practices employed in organizations. This overall objective implies to consider the interrelationships between the different parts of the Organization and its relationship with the environment. Studies administration and business management are aimed at learning theories, models and tools applicable to the processes of decision and management organizations.

The incorporation of sustainability in curriculum processes of students of the degree in management and business administration must be based on the requirements laid down in the Community directive of non-financial information.

The 2014/95/EU directive on disclosure of non-financial information and information on diversity of certain large companies and groups extends the content of the annual report of corporate governance required for corporations listed. They should rise, in a complementary manner, the State of non-financial information, whose

---

<sup>4</sup> Technological advances, changes in social, economic, generational and economic cause continuous changes in the work environment that require to the graduates to engage in job using independent learning also along for life (Vivel, Bua et al., 2015, p. 68).

<sup>5</sup> According to the RAE, employability is the potential to join and remain in the labour market, that is, the possibilities to find employment and adapt to a changing labour market.

content, briefly, should include the following areas:

- Environmental aspects, with detailed information on the current and foreseeable effects of the activities of the company in environmental, health and safety, the use or not of renewable energy, greenhouse gas emissions, the consumption water and air pollution.
- Social and aspects relating to specific personnel on measures taken to ensure gender equality, the implementation of the conventions of the International Labour Organization, conditions of work, social dialogue, respect for the right of the workers to be informed and consulted, the respect of trade union rights, health and safety in the workplace, the dialogue with the local communities and the measures taken to ensure the protection and the development of those communities.
- Human rights with information on the prevention of their violation and measures to mitigate, cope, and mend any damage committed.
- Information on the fight against corruption and bribery and implemented tools for detection and denunciation.
- Information on due diligence procedures applied by the company in relation to their supply and subcontracting chains. Activities carried out to identify and assess hazards, as well as verification and control.

The preparation of this information must be based on national frameworks, frameworks of the European Union, as the system of management and environmental auditing (EMAS), adapted to the Spanish legal order by the Royal Decree 239/2013, April 5, or based on international frameworks of the United Nations Global Compact, the lines of guidelines of the Organization of economic cooperation and development for multinational enterprises, the standards ISO 26000 from the International Organization for standardization or initiative The GRI sustainability reporting presentation world.

Societies that are not financial, given your application in Spain, to the elaboration of the status of information are public limited companies, limited liability companies and the audited actions which, in a way simultaneously, with consideration of public interest entities as it is regulated in the law on audit of accounts and in addition, complying with the following conditions (appears collected in the modification of paragraph 5 of article 49, of the Royal Decree of 22 August of) 1885, according to R.D.L. 18/2017, of 24 November; in the new wording of paragraph 5 of article 262 of the companies act of Capital, approved by R.D. Leg. (1/2010 of 2 July, according to the R.D.L. 18/2017, of 24 November):

- That the average number of employees during the financial year exceed 500 workers.
- During two consecutive years meet, at the closing date of each one of them, at least two of the following circumstances:
  - \* The total of the assets items exceeding 20,000,000 euros.
  - \* That the net amount of the annual turnover exceeds EUR 40,000,000.
  - \* That the average number of employees during the financial year exceed two hundred and fifty.
  - \* Small and medium-sized enterprises are exempted from the responsibility to withdraw up the State of non-financial data.

In recounting to the Auditors of accounts and auditing companies, should only arrest that it is submitted in the State with non-financial information, the audit of consolidated accounts of companies and private stories. For this reason, the amendment of article 35 of the law 22/2015, of 20 July, audit of accounts, on the account of the audit of the yearly accounts of public interest entities was necessary. It appears to collect in the new article 35,

paragraph 2, paragraph a), as R.D.L. 18/2017 modification, of 24 November, the auditor must verify only that the State of non-financial information is included in the annual report or, in his case, has incorporated this reference corresponding to the separate report. In the event that does not occur, this shall be on auditing report.

Amendments that have been introduced in Spanish to attending law to R.D.L. 18/2017, of November 24, shall apply to the financial periods starting from 1 January 2017. Two calculable exercises for the determination of obligatory presentation of the State of information non-financial, will be this exercise and the immediately preceding.

The normative obligation implies the need to modify the curriculum in grades of administration and management, in order to prepare students to meet the informational needs of organizations, as a consequence the lack of competencies related to the sustainability of the current curricula.

### **3. Skills of the Student of “Sustainability of the Information”**

Corporate governance has become a basic tool for the generation of value, the improvement of economic efficiency and the strengthening of the confidence of investors, in such a way that the G-20 communications indicate that the complexity of the structures of corporate governance of institutions and the lack of transparency and the inability to establish a chain of responsibility within the Organization, has been one of the relevant causes of the financial crisis in the world in recent years.

In relation to this claim, is the Government of the company and the managing body's managers does not establish the necessary means of control to ensure compliance with best practices of corporate governance, with the objective of minimizing the risks arising from business policies.

Organizations face the challenge of adapting a model of corporate governance constantly evolving, increasingly regulated and supervised, due to the greater demands of interest groups. They consider the systems of corporate governance as a key element of proper control over business management. “The important thing is to point out that corporate governance is not an individual instrument, but rather a concept that includes the debate on appropriate management and control of business structures”. Also includes the rules that regulate the relations of power between owners, the Board of Directors, management and, last but not least, stakeholders such as employees, suppliers, customers and the general public. (N.R. Narayana Murthy, Chairman of the Committee on corporate governance, joint values and bags of India, 2003).

In this environment, it is necessary to highlight the role of students in economics and management and administration of companies, when faced with the development of “Non-financial information” report, mandatory for the enforcement of commercial laws Spanish. In short, we are preparing future managers, responsible for making decisions at the highest corporate level. However, the questions we ask are as follows,

- Are our students ready for to elaborate of the new report?
- How can the University contribute to the attainment of the skills needed for the new business challenge?
- Curriculum in economics and business administration management grades in Spanish universities are prepared the guarantee of the necessary training based on the new information demands of organizations?
- Is the complementary formation via Master, suitable to acquire competence in the business reporting?

In this scenario, add the H2; is necessary to modify curricula in the degree of management and business administration?

Education in sustainable development could work from their specific skills by incorporating content and/or the General competences developing capacities in the student, allowing him to reflect on how their decisions, especially in critical situations, may have social, cultural, economic and environmental impact short-term and long-term in a local and global level (Rieckmann, 2018, p. 39), so buy a competition supposed to integrate knowledge, skills and attitudes for a task (Albareda Tiana & Conzalvo-Cirac, 2013, p. 144).

If competencies, both generic and specific identifier for the degree in management and business administration, comes to the conclusion that only two of them is linked to education in sustainability; that is, current curricula at the universities do not incorporate education in sustainability as relevant, although, we find two General competences that are linked with it<sup>6</sup>. These are:

- G 2: capacity to understand ethical responsibility and professional ethics of the profession of Economist activity. Know and apply the legislation and recognition of human rights as well as gender issues.
- G 5: ability to work as a team, lead, direct, plan and supervise multidisciplinary and multicultural teams, in the internal and international environment of the company and their respective departments, so that beneficial synergies be achieved for the entity.

To identify the skills needed for the elaboration of the “non-financial information report” and therefore, sustainability education, assume the methodology for the presentation of non-financial information, the European Commission<sup>7</sup>, to apply for the achievement of results. This can be summed up in the next steps:

1) Analysis of the initial situation of the company in the aspects required in the new model of business report: environmental, social, human rights, corruption, business risk assessment.

2) Definition of the indicators, in different areas.

3) Aggregation of information and data.

4) Application of indicators.

5) Reappraisal of the system.

6) Compliance with goals and objectives.

7) Formulation of the report, taking after the rules laid down in the Community directive.

The principal idea of establishing this type of report is derived, according to the communication of the European Commission (2017/c 215/01), four basic points, which has developed the methodology for the preparation of the non-financial information:

- Governance.
- Strategy.
- Management.
- Measurement of risk.

The need for a report of information not financial is a response to the world 2030 Agenda, adopted by the General Assembly of the United Nations in September 2015, making a significant contribution to the objectives of sustainable development and in a way specific to the following:

- Goal 5. Gender equality and women’s empowerment.
- Goal 6. Water and sanitation.
- Goal 7. Affordable energy and pollution.

---

<sup>6</sup> You can consult the verified memory of the degree in management and business administration from the University of Castilla-La Mancha, available online at: <https://www.uclm.es/toledo/fcjs/titulaciones18-19/gradoade/documentacion>.

<sup>7</sup> [https://eur-lex.europa.eu/legal-content/BG/TXT/PDF/?uri=CELEX:52017XC0705\(01\)&from=ES](https://eur-lex.europa.eu/legal-content/BG/TXT/PDF/?uri=CELEX:52017XC0705(01)&from=ES).

- Goal 8. Decent work and economic growth.
- Goal 9. Industry, innovation and infrastructure.
- Goal 10. Reduction of inequalities.
- Goal 11. Cities and sustainable communities.
- Goal 12. Responsible consumption and production.
- Goal 13. Climate action.
- Goal 17. Partnership for achieving the targets.

The main objective of the non-financial information is to be made based on a few principles to serve companies and organizations, from all economic sectors and to help them to disclose financial information that complies with the following features:

- Relevant.
- Relative importance.
- Significant.
- Useful.
- Comparable.

### **3.1 Fundamental Principles of Information Not Financial Sustainability: Bases for the Implementation of Training in Sustainability**

To comply with the characteristics of the information is necessary to application of some basic principles in the development of the same. These will ensure the connectivity between the different aspects of the non-financial information and financial information and non-financial. The knowledge of these principles implies a new formation for economists during the study of the degree in business administration.

#### **3.1.1 Meaningful Information: Relative Importance**

Materiality is a concept widely used by those responsible for drawing up the financial statements of the organizations and auditors of accounts. In general, we can establish that information of significant relative importance is that whose omissions or miscommunication, can influence the decisions of users of the financial statements of enterprises (IFRS, 2018). That is, the relative importance of the non-financial information implies that drawn up that information that is necessary to understand the impact of the activity of the company, from the perspective of social, environmental and human, based on the three basic aspects of sustainability and allow us to identify the different types of risks with serious effects linked to the three aspects or well, identify the terms in which such risks have materialized.

The credibility involves disclosing non-financial information that shows us the impact of the activity of a company, positive or negative. The information must be clear and balanced and should show the true picture of the society required by stakeholders. Although, we must consider that certain information is specific, depending on the characteristics of the entities, concrete situations and of the sector to which they go. Each business sector takes environmental, social challenges due to different variables, as an example, we can show what kind of natural resources used for the production of commodities and services. Bottling of mineral water cannot compare an oil company with a company. Why is necessary to develop what is known as key performance indicators for each of the different organizations on the basis of significant materiality of the information that should be integrated in its report of non-financial information. For this reason, the factors that should be taken to asses considered to evaluate the relative importance of the non-financial information to develop are as follows:

- Business model, strategy and key risks: active goals of society, functioning, management system



strategy, tangible and intangible, value chain and key risks.

- Problems in the sector where the activity is carried out: sometimes enterprises in the economic sector, considered the same relative importance in the information presented.
- Interests and expectations of stakeholders: companies must have contact with the different parties concerned (users of information) to try to ensure the fulfilment of their expectations.
- Impact of activities: societies should consider the severity and impact of their activities on society and the environment, as well as its products and services and social implications.
- Factors related to public policies and regulation. Sometimes, these variables may have a role in the actions of a society.

Examples of key indicators that conditions us the relative importance of the non-financial information to prepare:

- 1) A society that is dedicated to the production and bottling of mineral water can be considered relevant to the specific measures in place to protect the water resources of nature.
- 2) A company dedicated to the manufacture of wooden houses, consider the policies followed by its suppliers in relation to the usage of the soil, the alteration of ecosystems, deforestation as well as the procedures applied to ensure the resources of nature.
- 3) A company dedicated to the extraction of diamonds in South Africa should disclose the procedures applied in his business for the fulfilment of human rights, especially in regions of conflict and that their activity does not contribute to the conflict.

#### 3.1.2 Accurate, Balanced and Understandable Information

The State of non-financial information must reflect in a faithful way both favourable aspects and the unfavourable, evaluated from an impartial point of view. To do this, you should consider all available and reliable data required by users of business information, without incorporating opinion of the people responsible for developing it.

Then this information is impartial you can involve steps such as:

- Join independent members on the Board of Directors of the society, either appoint a Commission on sustainability and transparency.
- An adequate internal control of all activities with reporting and documentary evidence involving evidence sufficient and appropriate decisions and actions needed.
- Audit elaborate information and sources obtained for processing.

It must be fixed utilizing a simple and easy to understand language for the users and stakeholders. Jointly, the communication of the Organization towards the society can be more useful and transparent.

An example of key indicators of the results, which should be expressed in a simple and clear way would be those related to transparency in the presentation of the information linked to the strategy of the society, clear definition of its objects, methodology of work and policies related to corporate social responsibility, limitations, whereas human rights, of the development of their activities, objectives set out for the future and qualitative explanations of the objectives achieved and which is intended to achieve in the short, medium and long term, especially at the strategic level.

#### 3.1.3 Complete and Concise Information

The information reflected in the report of information not financial must be clear and understandable to all users, in order to be able to understand the evolution of the Organization, the results and the situation of the company in relation to the impact of the activity on the society, the environmental and social aspects, the respect

of human rights and the fight against corruption.

Whereas the directive, the minimum information, which must contain this report, focuses on points:

- Environment, social issues and stuff.
- Regard for human rights.
- Issues of corruption and bribery.

#### 3.1.4 Strategic and Prospective Information

The companies must report their model of business, its strategy and its impact in the short, medium and long term. Objectives, benchmarks, commitments, and ensuring the transparency of such data. With this type of information, users should measure the progress of a society towards the achievement of the long-term objectives. Example of indicators: a society may disclose information based on the impact foreseen in their strategies and natural processes of the climate change scenarios supported by scientific studies. You may also give away data about accidents and professional illnesses of its action.

#### 3.1.5 Stakeholder-oriented Information

Governing bodies must consider the information needs of all stakeholders, without being influenced by powerful groups. Stakeholders include employees, consumers, providers, clients, local communities, public administration or civil society. The ISO 26000 and the lines the OECD guidelines for multinational enterprises can be used as a model for information. Example of indicators would be important information regarding significant about his kinship with the parties interested and explain how this affects their decisions, their effects and the shock of their actions.

#### 3.1.6 Consistent and Systematic Information

The report should be consistent with the annual report. Establish clear links between the information submitted in the non-financial state and the management report allows the data to be useful, relevant, and more cohesive. The information must be consistent over time. This lets the users of information understand and compare changes past and present in the evolution, the place, and the outcomes of a society and the impact of their actions and be reliable based on the forward-looking information. Example: a company can designate relations and connections between their commercial enterprise model and prospects relating to corruption and bribery. Considering the content, the development and characteristics that must comply with the information presented in the State of non-financial information, we believe that the skills that students should acquire should focus on the following topics:

- 1) Analysis of the environmental management of companies, from a holistic view.
- 2) Social aspects, equality and rights of workers, from a holistic perspective.

### **3.2 Analysis of the Environmental Management**

Within the management of this scheme, the most significant aspects associated with the actions of the business units, developed under what is known as environmental sustainability, we notice:

- Atmospheric emissions.
- Discharges to water.
- Waste management.
- Contamination of the soil.
- Use of raw materials and natural resources.
- Other environmental issues affecting the community.

Environmental management aims to distinguish all the significant aspects associated with activities, products or services, not requiring the evaluation of unitary form of each final output. Each organization is responsible for

group activities, by batches of products, or by type of services according to the characteristics inherent to herself. In general terms, environmental indicators are responsible for summarizing extensive data in meaningful and comparable key information, in order to present comprehensive and quantifiable, how to measure the environmental performance of a company management of environmental policy. Although, within the set of indicators that can be defined, must be distinguished among the indicators in absolute terms, which do not indicate the resource consumption and emissions in relative terms that are responsible for considering the efficiency of production, for the analysis of the improvement.

Whereas various reports of the European Commission, for the quantitative development of the advantages set out above, four large blocks of indicators should be identified:

- Indicators that can be elaborated, because the organizations have of data and are reliable.
- Indicators that can develop in a partial manner, since the data appear incomplete and are not updated.
- Indicators that may be or the future, since even with the existence of data are not considered reliable for a thorough analysis.
- Indicators, which, even with available data are not sufficiently significant and require different methodological support.

Environmental indicators of the fellowship are classified into two large blocks, and each of them, an additional set of sub-indicators are recognized (Jimenez, 2009, p. 123):

- 1) Environmental performance indicators.
- 2) Indicators of environmental management.
- 3) Indicators of environmental situation.

**Table 1 Environmental Performance Indicators**

<b>a. Material and energy indicators</b>	
Flowmeters: factors used by the Organization for the development of environmental commitment	Materials: consumption of materials recovered by producing unit; consumption of materials recovered per kg of total consumption Energy: Consumption energy absolute; energy use per unit produced; consumption of renewable energy per produced unit; percentage of renewable energy used in relation to total use of goods and services. Water: consumption of water per unit produced. Consumption by units of time.
Output indicators: analysis of the outputs produced on the basis of environmental management	Production of hazardous waste: in absolute terms; per unit produced. Atmospheric emissions (ozone, particles and sulphur dioxide). Greenhouse gas emission rate. Sewage: cubic metre of water by measurement of yield. <i>Merchandise</i> Discharges of polluting substances (fertilizers, organic materials, chemicals)
<b>b. Infrastructure and transport indicators</b>	
Infrastructure indicators: analysis of external and internal behaviour linked to determinants of the productive structure and services of the company.	Ingestion of toxic chemicals. Resource productivity. Rate of recycling of materials (paper, composition board and glass). GENERACION of hazardous waste. Spending on information technology. Knowledge economy: environmental training per employee cost rate
Indicators of transport: quantitative measures focused on the analysis of the function of external relationship of the company with users. These indicators of transport could arise from the policy of just — in time, with the aim of reducing costs of provisioning in the broadest sense.	Energy according to the mode of transportation Modal distribution of transport (dependence of road goods transport). Investments in transport infrastructure. Volumes of freight. Fuel cost savings: by the use of those environmental

**Table 2 Indicators of Environmental Management**

<p><i>Indicators of the system:</i> quantitative expression of the implementation of the environmental management system developed by the organization. Quantitative analysis of environmental performance, according to the model ISO 14000 or EMAS</p>	<ul style="list-style-type: none"> <li>• <i>Implementation of the environmental system:</i> results of environmental audits; the audit costs per person. Cost of the audit by product line; by market sector; or by plant.</li> <li>• <i>Legal aspects:</i> compliance with legislation in force; percentage of penalties for exercise.</li> <li>• <i>Environmental costs:</i> based on the analysis of the cost of quality. Costs of prevention cost of assessment and costs of failures.</li> </ul>
<p><i>Performance indicators:</i> quantitative expression of the development of environmental policy, such as implementation of the chosen management system</p>	<ul style="list-style-type: none"> <li>• <i>Staff training:</i> currency units invested by human resources; economic units per year.</li> <li>• <i>Safety and hygiene:</i> levels of exposure to contaminants per person; measurements of acoustic exposure per person.</li> <li>• <i>Purchases of factors:</i> percentage of employees' sustainable factors by product obtained; percentage of recyclable factors used by product.</li> <li>• <i>External relations:</i> cost per product advice on environmental matters; cost per person for advice on environmental matters; cost per plant; cost per product line; cost per market section.</li> </ul>

**Table 3 Indicators of Environmental Situation**

<p><i>Indicators of the environmental situation:</i> quantitative expression of the environmental commitment of the Organization to the environment, both own work and at general level of society</p>	<ul style="list-style-type: none"> <li>• <i>Water indicators:</i> measures of purity of water from lakes to the company; contamination of the filtrated nearby; use of water in the process of activity; concentration of nitrates and phosphates in aquifers near the company.</li> <li>• <i>Soil indicators:</i> concentration of pollutants per square meter; percentage of recovery of land for agriculture; rate of enrichment of soil per square meter.</li> <li>• <i>Indicators of air:</i> purity of air per cubic meter within the Organization; percentage of necessary moisture for good respiration; levels of headings pollutants in the air of the workplace.</li> <li>• <i>Indicators of Flora and Fauna:</i> percentages of recovery of flora; participation in social projects of recovery of flora and fauna; rate of return for environmental public or private projects.</li> </ul>
--	---

The development and study of this information and its relationship with the subjects of curriculum in the current in the degree of management and business, has led us to consider the H3, previously exposed.

### **3.3 Social Issues, Equality and Rights of Human Resources**

This second large block of study, relevant in the preparation of the reports of non-financial information and following the guidelines of the Community directive, requires the elaboration of information linked to the following aspects:

- Application of core Conventions of the International Labour Organization.
- Development of issues relating to the diversity of gender and equal treatment in employment and occupation, considering the age, gender, sexual orientation, religion, disability, ethnicity.
- Labour aspects of the participation of workers and the conditions of employment and workplace.
- Trade Union Relations and respect for trade union rights.
- Safety and health in the workplace.
- Relations with consumers and their satisfaction, accessibility, and products with potential effects on their health and safety.
- Responsibility to research and commercialization.
- Community relations, including the social and economic development of local communities.
- Potential and actual impact of business activities in the individual and collective human rights.
- Medium to prevent abuses in the human rights of people and society, linked with the Organization.
- Elaboration of some guiding principles of enterprises to promote the protection, respect for and

compliance with human rights and settle their violations.

These social aspects, the incorporation of an aspect of relative importance in today's world of business, which is the corruption and bribery, is key. By which companies must explain the measures taken or can take to fight corruption by all parties interested in the activity.

The fulfilment of these needs of non-financial information shows the need to develop a set of indicators, which can be classified in the following fields (in line with the EU directive): (to summarize)

- 1) Social aspects and human resource indicators (Table 4).
- 2) Indicators of human rights.
- 3) Indicators of corruption and bribery.

#### 3.3.1 Social Aspects and Human Resource Indicators

**Table 4 Social Aspects and Human Resource Indicators**

Gender diversity	<p>Details about the objectives, measures, form in which have been applied and the results of the period, as well as the dimensions of diversity: training, professional experience, age, disability, and gender.</p> <p>Number of women with permanent contract.</p> <p>Number of women in senior management positions.</p> <p>Number of parental.</p> <p>Percentage growth of template according to gender.</p> <p>Enterprise internal training according to gender.</p> <p>Number of employees with family conciliation.</p>
Indicators of social nature	<p>Retention and attraction of managers.</p> <p>The total staff turnover rate.</p> <p>Percentage of staff with disabilities.</p> <p>Development of the workforce during the period in relation to the profitability of the Organization.</p> <p>A measure of social assistance granted to human resources.</p> <p>Updating knowledge for professional development.</p> <p>The Percentage of working days lost by mild common illness or lack of motivation at work.</p> <p>Total number of lost days.</p> <p>Operations for information workers.</p> <p>Absenteeism studies and policies of business motivation.</p>

#### 3.3.2 Indicators of Human Rights<sup>8</sup>

This is a very vast field in which organizations can develop that set of information they consider necessary for the fulfilment of the legal requirements of the development of non-financial information. What is important and relevant, is not only the development of indicators, if not their interpretation and analysis within the policies and procedures to implement in institutions and their management. Hence, the need for new training for students. In this regard, and given the scope of indicators that can be produced, let indicated large blocks of them, always following the publication of the United Nations, as well as their indications. For this reason, the aspects on which information should be developed are:

- Right to liberty and security of individuals.
- Right to the enjoyment to the highest attainable standard of physical and mental health.
- Right to any individual is subjected to ill-treatment, cruel or degrading treatment or punishment.
- Right to participate in public affairs and, therefore, to have information.
- Right to freedom of opinion and expression.

---

<sup>8</sup> The indicators have been raised following the recommendations of the Guide for the measurement and the application of human rights published by the UN in 2012 and available online at: [https://www.ohchr.org/Documents/Publications/Human\\_rights\\_indicators\\_sp.pdf](https://www.ohchr.org/Documents/Publications/Human_rights_indicators_sp.pdf).

- Right to non-discrimination and equality.

### 3.3.3 Indicators of Corruption and Bribery

As in previous gauge cluster, aspects are multiple to be treated, as well as the formation of responsible for processing and analysis. Globally, aspects to prepare to complete the non-financial information about organizations should focus on the following aspects:

- Policies, procedures, and anti-corruption standards.
- Criteria used in the assessments of risks related to corruption.
- Procedures and internal control resources devoted to preventing corruption and bribery.
- Employees who have received adequate training in the detection of corruption and bribery.
- Mechanism of whistle-blowing.
- A number of legal actions pending or completed on behaviour contrary to the practices and policies of the company.
- Embezzlement and safeguards of assets.
- Joint actions with the internal auditors and external organizations for the prevention of risks associated with financial resources.
- Influence of interest groups on the political and administrative decisions in the direction of the company.

The aspects necessary to incorporate into the report's non-financial information, and linked are in line the ODS of the 2030 Agenda.

As we propose, the intrinsic powers of current curricula, in the management and administration of companies, do not incorporate sufficient training in the preparation and analysis of the information raised globally.

From this analysis, the approach of the study hypothesis 3 is inferred.

## **4. Conclusion: Approach of the Transversal Subject “Sustainability of the Information”**

For the reasons above stated, the answer to the hypothesis, H3 would need to introduce a transversal subject in the curricula of students in economics and management and business administration studies, in order to acquire the? Skills needed in the European space of higher education (EEES), to get the new business reports? It has led to the development of the curriculum of a new subject, crosscutting, in the curriculum of grade of administration and management, which we have called “Sustainability of information”.

The same approach is part of the fulfilment of the objective of sustainable development 4, “Quality education” which establishes the need to ensure an inclusive, equitable education and quality to promote learning opportunities throughout life for everyone. Specifically, we focus on the goal 4.7, which establishes that by 2030, it is necessary to ensure that all students acquire the knowledge and skills necessary to promote sustainable development, inter alia through education for sustainable development and sustainable lifestyles, human rights, gender equality, the promotion of a culture of peace and non-violence, world citizenship and the valuation of cultural diversity and the contribution of culture’s contribution to the sustainable development.

The relevant indicator for the achievement of the goal of 4.1, is known as 4.7.1, extend to which:

- 1) Global citizenship education and
- 2) Education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in:
  - a) National education policies,

- b) Curricula,
- c) Teacher education and
- d) Student assessment

The presentation of the subject of “Sustainability of information” would be exposed in the following Table 5.

**Table 5 Degree in Administration and Business Management. Subject “Sustainability of Information”**

DSGs-Skills Objectives Grado-Areas of Knowledge		
Objetivos DSGS		
<p><b>Goal 1.</b> Put an end to hunger, achieve food security and nutrition improvement, and promote sustainable agriculture.</p> <p><b>Goal 2.</b> Ensure inclusive and equitable quality education and promote lifelong learning for all opportunities.</p> <p><b>Goal 3.</b> Achieving gender equality and to empower all women and girls.</p> <p><b>Goal 4.</b> Ensure access to reliable, affordable, sustainable, modern energy for all.</p> <p><b>Objective 5.</b> Promote sustainable, inclusive and sustainable economic growth, full and productive employment and decent work for all.</p> <p><b>Goal 6.</b> Ensure that the cities and human settlements are inclusive, safe, resistant and sustainable.</p> <p><b>Goal 7.</b> Ensure sustainable consumption and production patterns.</p> <p><b>Goal 8.</b> Promote peaceful and inclusive societies for sustainable development, facilitating access to justice for all and build effective and inclusive institutions that held accountable at all levels.</p>	<p><b>Powers of the Degree (UCLM)</b></p> <p><b>G 2: Capacity to understand ethical responsibility and professional ethics of the profession of Economist activity. Know and apply the legislation and recognition of human rights as well as gender issues.</b></p> <p><b>G 5: ability to work as a team, lead, direct, plan and supervise multidisciplinary and multicultural teams, in the national and international environment of the company and their respective departments, so that beneficial synergies be achieved for the entity</b></p>	<p><b>Subjects</b></p> <p><b>Spanish and International Economy</b></p> <p><b>Tax Business</b></p> <p><b>Financial Accounting</b></p> <p><b>Management Accounting</b></p> <p><b>Financial Statements Analysis</b></p> <p><b>Organization and resources human</b></p> <p><b>Direction of operations</b></p> <p><b>Finance</b></p> <p><b>Business</b></p> <p><b>Sociology</b></p> <p><b>Environmental Studies</b></p> <p><b>Labor Low</b></p> <p><b>Merchant Low</b></p> <p><b>Criminal Low</b></p>

FINAL DEGREE PROJECT

The first column shows the differing objectives of sustainable development, according to the UN 2030 Agenda, as described on previous pages. The second column reflects the competencies of sustainability collected in the memoirs of degree of management and business administration, in the case of Spain. The third column reflects the necessary study materials on the subject proposed for the implementation of the OBS and competences of the degree. The final work proposed, focuses, in the elaboration, under a company type, of the report of information not financial, according to the requirements established throughout our research.

## References

- Albareda-Tiana Silvia and Gonzalvo-Cirac Margarita (2013). “Competencias genéricas en sostenibilidad en la Educación superior. Revisión y compilación”, *Revista de Comunicación de la SEECI*, Vol. 15, No. 32, pp. 141-159.
- Álvarez Pérez Pedro R. and López Aguilar David (2011). “El absentismo en la enseñanza universitaria: Un obstáculo para la participación y el trabajo autónomo del alumnado”, *Bordón*, Vol. 63, No. 3, pp. 43-56.
- ANECA (2005). *Libro Blanco Título de Grado en Economía y Empresa*, available online at: [http://www.aneca.es/var/media/150292/libroblanco\\_economia\\_def.pdf](http://www.aneca.es/var/media/150292/libroblanco_economia_def.pdf).
- Aznar Minguet Pilar (2006). “El reto educativo de la sostenibilidad en el marco del espacio europeo de la educación superior”, in: A. Escolano Benito, *Educación Superior y Desarrollo Sostenible*, Madrid: Biblioteca Nueva.
- Comisión De Las Comunidades Europeas (2001). *Libro Verde: Fomentar Un Marco Europeo Para la Responsabilidad Social de la Empresa*. Bruselas, p. 7.
- Comisión Mundial Para El Medio Ambiente y El Desarrollo (1987). *Informe de la Comisión Mundial sobre el Medio Ambiente y el Desarrollo. Nuestro Futuro Común (Informe Brundtland)*, ONU Publishing.
- Comisión Mundial Para El Medio Ambiente y El Desarrollo (1987). *Informe de la Comisión Mundial sobre el Medio Ambiente y el Desarrollo. Nuestro futuro Común (Informe Brundtland)*, ONU Publishing.
- Conferencia De Rectores De Las Universidades Españolas (CRUE) (2005). *Directrices para la Introducción de la Sostenibilidad en el Curriculum*, Valladolid.
- Directiva 2014/95/UE sobre divulgación de información no financiera e información sobre diversidad de determinadas grandes empresas y determinados grupos, accessed on 12/12/2018, available online at: <https://www.boe.es/doue/2014/330/L00001-00009.pdf>.
- Fedriani Martel Eugenio M. and Romano Paguillo Inmaculada (2011). “Causas del rendimiento académico en asignaturas cuantitativas de la Facultad de Ciencias Empresariales”, in: *XIX Jornadas ASEPUM—VII Encuentro Internacional*, 21 y 22 de julio, Valencia.
- Gobierno De España (2018). *Plan de Acción para la Implementación de la Agenda 2030*, Hacia una Estrategia Española de Desarrollo Sostenible.
- Jimenez Montañes M. A. (2009): “Indicadores de desempeño ambiental en el marco de la ISO 2600 RS”, in: *Pecvnia: Revista de la Facultad de Ciencias Económicas y Empresariales, Universidad de León* 9, pp. 111-128, doi: <http://dx.doi.org/10.18002/pec.v0i9.664>.
- Leicht Alexander, Heiss Julia and Won Jung Byun (Eds.) (2018). *Issues and Trends in Education for Sustainable Development*, París: UNESCO Publishing.
- LEY ORGÁNICA 5/2002, de 19 de junio, de las Cualificaciones y de la Formación Profesional [BOE: 20 de junio de 2002].
- Martínez Mª P., Aznar Pilar, Ull Angels and Piñero A. (2007). “Promoción de la sostenibilidad en los currícula de la enseñanza superior desde el punto de vista del profesorado: Un modelo de formación por competencias”, in: *Educatio Siglo XXI*, pp. 187-208.
- Organización De Naciones Unidas (2002). *Decenio de las Naciones Unidas de la Educación para el Desarrollo Sostenible 2005-2014. Resolución n° 57/254 de la Asamblea General de las Naciones Unidas*, ONU Publishing.
- Organización De Naciones Unidas (2015). *Agenda 2030 para el Desarrollo Sostenible*, accessed on 23/01/2019, available online at: <https://www.un.org/sustainabledevelopment/es/2015/09/la-asamblea-general-adopta-la-agenda-2030-para-el-desarrollo-sostenible>.
- Organización De Naciones Unidas (ONU) (2006). *Decenio de las Naciones Unidas de la Educación para el Desarrollo Sostenible (2005-2014). Plan de aplicación internacional*, París: UNESCO Publishing.
- Quality Assurance Agency for Higher Education (2015). *Subject Benchmark Statement. Business and Management*, accessed on



**“ Sustainability of Information” as a New Subject in University Degrees in Business Management and Administration:  
Reporting of Non-financial Information — Spanish Case**

---

23/01/2019, available online at: [http://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-business-management-15.pdf?sfvrsn=c7e1f781\\_6](http://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-business-management-15.pdf?sfvrsn=c7e1f781_6).

REAL DECRETO 1393/2007, de 29 de octubre, por el que se establece la ordenación de las enseñanzas universitarias oficiales [BOE: 30 de octubre 2007].

Rieckmann Marco (2018). “Learning to transform the world: key competencies in Education for Sustainable Development”, in: Leicht A., Heiss J. and Byun W. (Eds.), *Issues and Trends in Education for Sustainable Development*, París: UNESCO Publishing, pp. 39-59.

Universidad De Castilla-La Mancha (2018). “Memoria Verificada del Grado en Administración y Dirección de Empresas”, accessed on 2/11/2018, available online at: <https://www.uclm.es/toledo/fcjs/titulaciones18-19/gradoade/documentacion>.

Van-Der Hofstadt Roman Carlos and José María Gómez Gras (2013). *Competencias y Habilidades Profesionales para Universitarios*, Madrid: Díaz de Santos.

Vivel Milagros, Fernández Sara, Lado Rubén and Otero Luis (2015). “Cómo mejorar la asimilación de los contenidos teóricos por parte del alumnado universitario? Una aplicación del *One Minute Paper* en contabilidad”, *Revista Iberoamericana Sobre Calidad, Eficacia y Cambio En Educación*, Vol. 13, No. 2, pp. 67-84.