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# Learning and Skills for Sustainable Development: Academic or Organizational Training?

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# Learning and Skills for Sustainable Development: Academic or Organizational Training? \*

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## Abstract

Organizational sustainable development know-how is necessary to meet current environmental, social and economic challenges. This article follows the Education for Sustainable Development Report questioning which skills are currently in greatest demand by employers with regards to sustainable development. Aiming to better understand the duality (complementarity and substitutability) of sustainable development skills, depending on whether they are acquired through academic education or within an organization, this paper analyzes the links between the sustainable development skills sought by an organization and 1) the sustainable development actions it actually carried out, as well as 2) explanatory factors specific to the company. Based on a questionnaire survey conducted in May 2016 with 561 respondents from organizations in the province of Quebec, variables of interest were identified and measured with regards to sustainable development skills, in-house training offerings and the valorization of academic learning. The collected data allowed for the comparison of these elements with the sustainable development programs adopted internally as well as the characteristics of the various organizations (e.g. size, sector). This comparison was accomplished through a list of concrete actions, notably using chi square analysis, factor analysis, correlation and mean comparisons. The study makes four specific contributions: 1) Sustainable development skills are valued by many organizations, most often through a complementary valorization of both in-house (“internal”) training offerings as well as academic study; 2) Organizations that value the acquisition of skills in sustainable development in a complementary way stand out as the most active in their approach to sustainable development; 3) The exclusive valorization of internal sustainable development training underpins a certain level of organizational engagement with these topics, whereas the exclusive valorization of academically obtained skills reveals a weaker concretization of sustainable development, and therefore a need to compensate for a gap and 4) Gaps are highlighted between actions and the valorization of sustainable development skills, according to the characteristics of the organization.

**Keywords:** Skills, Sustainable Development, Organizations, Academic Education

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## **1- Introduction**

A broad societal commitment to sustainable development is inherent to the 21<sup>st</sup> century world. Indeed, the preservation of environmental resources and capital depends largely on the current choices being made by societies. However, sustainable development also offers significant opportunities for socio-economic advancement. From this perspective, organizations are increasingly adopting sustainable development based approaches. As such, there seems to be a greater valorization of skills pertaining to sustainable development in the last few years, be it in the field of education for sustainable development or in the management sphere - two areas that are rarely the subject of cross analysis.

This article incorporates the *Education for Sustainable Development Report* questioning which skills are currently in greatest demand by employers with regards to sustainable development. It aims to better understand the duality (complementarity and substitutability) of sustainable development skills, depending on whether they are acquired through academic education or within an organization. To do so, the links are analyzed between the skills sought by an organization and the actual sustainable development actions it carried out, as well as the explanatory factors specific to the company.

The next section will proceed with a review of the relevant literature and a presentation of the research questions. In Section 3, the research methodology will be presented. Section 4 will present the results, which will then be analyzed in Section 5. Finally, the conclusion will consist of some possible implications of the results and proposed future avenues of research.

## **2- Literature review and research questions**

The concept of sustainable development has many definitions and approaches, given its complexity and multidimensional nature (Zaccai, 2011). Here, the Brundtland Report (1987) definition is chosen: " [Development that] meets the needs of the present without compromising the ability of future generations to meet their own needs." Additionally, the considerable expansion of the concept of sustainable development in the wake of the Earth Summit held in Rio in 2012, particularly in the social sphere, must be kept in mind.

Increasingly, research is beginning to characterize and analyze organizational approaches to sustainable development, both public and private. Such analytic breakthroughs are important, as sustainable development is now gaining momentum in the administrative and commercial spheres. The *Global Reporting Initiative* (2015) highlighted the fact that commitment to a sustainable development approach can have several benefits for a public organization, notably in the optimization of financial performance (Global reporting initiative, 2015). From a complementary perspective, Fox et al. (2002) observed that the application of a sustainable development policy can allow public organizations to increase their efficiency and institutional transparency.

Studies concerning the involvement of private organizations in a sustainable development approach have also tended to increase in number. Becherer and Helms (2014) demonstrated that the pursuit of environmental objectives can be conducive to positive business outcomes, such as sales and

profits. Furthermore, Gunther et al. (2007) studied the relationships between private companies' adoption of a sustainable development approach and improved brand images. They concluded that this relationship is positive.

However, the literature review indicates that sustainable development approaches need to be studied according to the specific characteristics of organizations in question. Indeed, researchers have observed that small and medium-sized enterprises may be less inclined to engage in a sustainable development approach since they may lack the necessary financial means (Callot, 2014; McEwen, 2013, Pinget, Bocquet, & Mothe, 2015). Conversely, the situation of large firms has also been studied, demonstrating that their operational characteristics (production methods, target markets, regulation, stakeholder relations) are factors likely to favor the adoption of a structured approach to sustainable development.

There have, to date, been some studies on the theme of employability in fields related to sustainable development. For example, Boivin, Berthold, and Tanguay (2018) looked at hiring characteristics following the adoption of a sustainable development approach in a private and/or public organization, designing their research to account for the characteristics of the organizations studied. Furthermore, authors such as Gausas, Owczarzak, and Paliokaite (2013) sought to use qualitative approaches to measure the role of a candidate's skills in the hiring process for sustainable development related mandates. This type of research is particularly relevant to the field of study assessing the development of these skills through education for sustainable development. It must be emphasized that numerous and prolific works in this field already exist. For example, the work of the Wiek team (2011) explored the main skills (key competencies) which can be developed through sustainable development training, namely systems thinking abilities, anticipatory abilities, normative skills, strategic skills and interpersonal skills. On the other hand, authors such as Bürgener and Barth (2018) have contributed to the study of skills that educators must develop to ensure quality teaching in sustainable development education. In particular, they focused on the analysis of environments that favour the development of skills, highlighting the importance that training institutions have transdisciplinary teams. Similarly, the integration of sustainable development skills within work teams can also be accomplished through in-house training. This type of program would support the accumulation of skills specific to the sustainable development field (Cosby, 2014), even to the same degree as the academic route (Brundiers, Wiek, & Redman, 2010).

However, studies have not explored the processes that underpin the recognition of sustainable development skills within organizations engaged in the sustainable development field. This article thus attempts to answer two research questions.

- 1- How do organizations value sustainable development skills when hiring? The level of recognition and the acquisition mode of sustainable development skills are analyzed, comparing academic training and in-house training.
- 2- What links exist between the valorization of sustainable development skills and the intensity of sustainable development actions carried out in an organization? The analysis focuses on the divergences and similarities observed between a given organization's level

of commitment to sustainable development and the sustainable development skills valorization mode, which is either complementary or substitutable (1: complementarity training internal-academic 2: academic training only 3: internal training only and 4: non-valorization). The valorization of skills in sustainable development is also studied in terms of the characteristics of the organization.

### **3- Methodology**

Based on a questionnaire survey conducted in May 2016 with 561 respondents from organizations in the Canadian province of Quebec<sup>3</sup>, variables of interest were identified and measured with regards to sustainable development skills, in-house training offerings and the valorization of academic learning. The data were compiled as part of a survey conducted by the Université Laval Placement Service (SPLA), based on a non-probability sample since the answers were obtained voluntarily. The sampling targeted organizations from all economic sectors and included all NAICS codes<sup>4</sup>. The organizations targeted operated in several administrative regions of Quebec. Although not representative of all organizations across the entire province, the data still reflect a reality of the employment basin in Quebec City.

In terms of content, the survey included 17 questions, most of which used a Likert scale, guiding respondents to define the sustainable development approaches implemented within their organization, and, with regards to eventual hiring activities, to specify the type of skills sought and the level of interest in a qualified workforce in terms of sustainable development. Finally, the survey sought to characterize the profile of the organization employing each given respondent (industry, type of organization, size, etc.).

The collected data allows for the comparison of these elements and the sustainable development programs adopted internally. This comparison was accomplished through a list of concrete actions implemented within an organization, selected to ensure coverage of all dimensions of sustainable development, sometimes separately and sometimes simultaneously. For example, the indicator "Consideration of the Needs and Expectations of Future Generations" touches on all dimensions of sustainable development, while others relate to one or two dimensions.

Regarding data processing, factor analysis was performed to study the interrelations between the variables, group the variables into factors, and generate composite indices. Kruskal-Wallis tests were performed to compare the results of various employability variables, as well as correlation analysis.

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<sup>3</sup> The questionnaire was emailed to the 15,820 active contacts in the SPLA registry, representing 9,916 organizations. In some cases, more than one respondent per organization could respond to the survey (10% estimated duplicates). Since this figure is an approximation, and identification of the affiliation to the participants' businesses is impossible, this project speaks in terms of respondents rather than organizations.

<sup>4</sup> Classification system for industries in North America.

## 4- Results

The data collected from respondents were processed and analyzed to answer the research questions. The results are presented starting with actions in sustainable development, followed by the elements concerning the valorization of skills in sustainable development.

### *Sustainable Development Actions in Organizations*

A commitment to sustainable development is clearly present in the organizations surveyed, as two out of three respondents say that their employer has implemented a sustainable development approach (67.1%). These commitments are translated into 15 actions related to sustainable development and applied to organizations. Table 1 presents these variables, the averages given by respondents and the standard deviation of these responses. On a four-point scale, consideration of the social impacts of the organization's activities (3.13 / 4) comes first, followed by the adoption of healthy lifestyle habits (3.04 / 4) and then the consideration of the expectations and needs of future generations (2.99 / 4). Variables related to the evaluation and publication of environmental and social performance information are at the bottom of the list.

**Table 1** Mean and standard deviation of of sustainable development actions

Variable	N	Mean	Standard Deviation
V3_ In our company, we consider the social impacts of our activities.	546	3.13	.899
V15_ In our company, we promote the adoption of healthy lifestyle habits.	547	3.04	1.007
V6_ In our company, we take into consideration the needs and expectations of young people and future generations.	546	2.99	.969
V1_ In our company, we consider the impacts of our activities on the environment.	540	2.96	.908
V5_ Our company is involved in its community.	541	2.95	1.058
V4_ Our company participates in activities to support certain social causes.	536	2.90	1.012
V13_ In the office, we reduced our consumption of supplies. Ex .: recycling, paperless meetings, recovery of ink cartridges ...	544	2.85	1.023
V10_ In our business, we have opted for local or regional products, services or suppliers.	504	2.79	.831
V2_ Our company participates in activities that aim to protect and improve the quality of the environment.	531	2.62	1.141
V14_ In the office, we have reduced our energy consumption. Ex .: Turn off electrical appliances and lights, encourage public transit, etc.	545	2.59	1.081
V7_ In our company, we evaluate our social and environmental performance.	538	2.45	1.212
V12_ Our company takes into account the environmental impact of our product or service throughout its entire life cycle (raw materials, production, transportation, packaging, use, disposal).	445	2.15	1.373
V8_ We publish evaluations of our social performance.	473	1.73	1.463
V9_ We publish evaluations of our environmental performance.	473	1.67	1.505
V11_ In our company, we measure our greenhouse gas (GHG) emissions.	415	1.39	1.582

Question: How often have you witnessed the following behaviors in your business? (scale from 0 to 4, or 0 = never and 4 = always)

## Factor Analysis of Sustainable Development Actions in Organizations

Based on these sustainable development related actions implemented in organizations, a factor analysis was performed. The initial examination of the Pearson correlation matrix incorporating the 15 variables made it possible to evaluate the internal consistency of the measurement instrument. The importance of looking for similar elements that can make up the factors was revealed by the presence of moderate correlations between the variables (Taylor, 1990). Following this observation, Bartlett's test of sphericity (Sig. 0.000) showed that it is pertinent to seek components, and the Kaiser-Meyer-Olkin coefficient (0.899) implied that the variables are sufficiently correlated to perform factor analysis (Stafford, Bodson, & Stafford, 2006).

To extract the factors, the eigenvalue of the components was examined, representing the explained variance (Ferguson & Takane, 1989). Also, applying a varimax rotation highlighted the one-dimensionality of the factors. Three components emerged from the factor analysis, explaining 64% of sustainable development actions conducted in organizations (Table 2). To interpret the importance of the different levels, means were calculated for all components. The social dimension obtained the highest score (2.95), followed by the economic factor (2.83), and environment component (2.21).

**Table 2** Factor analysis based on sustainable development action conducted in an organization

Components and variables	Coefficients	Variance explained	
		Real*	Internal
<b>Component 1: Environment (moyenne = 2,21)</b>		45.8%	72.0%
V9_ We publish evaluations of our environmental performance.	0.815		
V11_ In our company, we measure our greenhouse gas (GHG) emissions.	0.760		
V2_ Our company participates in activities that aim to protect and improve the quality of the environment.	0.721		
V12_ Our company takes into account the environmental impact of our product or service throughout its entire life cycle (raw materials, production, transportation, packaging, use, disposal).	0.697		
V7_ In our company, we evaluate our social and environmental performance.	0.694		
V1_ In our company, we consider the impacts of our activities on the environment.	0.657		
V8_ We publish evaluations of our social performance.	0.634		
<b>Component 2: Social (moyenne : 2,95)</b>		9.7%	15.2%
V5_ Our company is involved in its community.	0.828		
V4_ Our company participates in activities to support certain social causes.	0.786		
V6_ In our company, we take into consideration the needs and expectations of young people and future generations.	0.738		
V3_ In our company, we consider the social impacts of our activities.	0.539		
V10_ In our business, we have opted for local or regional products, services or suppliers.	0.436		
<b>Component 3: Economy (moyenne = 2,83)</b>		8.2%	12.9%
V13_ In the office, we reduced our consumption of supplies. Ex .: recycling, paperless meetings, recovery of ink cartridges...	0.830		
V14_ In the office, we have reduced our energy consumption. Ex .: Turn off electrical appliances and lights, encourage public transit, etc.	0.814		
V15_ In our company, we promote the adoption of healthy lifestyle habits.	0.637		
<b>Total variance</b>		<b>63.7%</b>	<b>100.0%</b>
*Before rotation			

Question: How often have you witnessed the following behaviors in your business? (scale from 0 to 4, or 0 = never and 4 = always)

Internal consistency was tested using Cronbach's alpha. For all the sustainable development action variables, this index was 0.914, a level generally recognized as acceptable in fundamental research

(DeVellis, 2012; Perrien, Chéron, & Zins, 1983). Therefore, the measurement scale is valid and has a good internal consistency. Also confirming the validity of a group of statements (Stafford et al., 2006), the value of the alpha for each factor shows an acceptable level of internal consistency in fundamental research (environment: 0.894; social: 0.787; economy: 0.778).

#### *Employability Related to Sustainable Development Skills*

Variables related to the employability of individuals with sustainable development skills were also assessed (Table 4). If, in general, respondents said that the organization they work for pays attention to sustainable development skills (1.83 / 3), the hiring of staff with academic training in this area had the highest average (1.85 / 3).

**Table 4** Employability propensity in relation to sustainable development

Variable	Wording	N	Mostly Yes (%)	Mean	Standard Deviation
General interest, SD Skills <sup>5</sup>	Do you see an interest for your company to have staff who are competent in sustainable development?	489	63.2	1.83	.986
SD Academic Training	Is your company management ready to hire staff who have acquired sustainable development skills during their studies?	428	65.9	1.85	1.004
SD Internal Training	Is your company management ready to offer sustainable development training to employees who are currently part of the company?	430	58.4	1.65	1.040

Questions: Answer each of the following questions about employability to the best of your knowledge (scale from 0 to 3, or 0 = not at all and 3 = a lot). Mostly yes = 2-3 | Mostly no = 0-1.

#### *Commitment to Sustainable Development and Enhancement of Skills in Organizations*

The relationship between sustainable development actions carried out in an organization and the level of valorization of skills at hiring is hereby examined. Mean comparisons for sustainable development actions factors were conducted between employability variables (dichotomised for the exercise), based on Kruskal-Wallis tests. All organizations valorizing sustainable development competencies, whether acquired in the academic process or during internal training, have statistically significant ratings for sustainable dimensions actions (Table 5). For example, organizations with an interest in sustainability skills in general are significantly more engaged in environmental actions (2.57) than those with no interest (1.59). The observation is the same for the other dimensions. For an organization, an interest in sustainable development skills is therefore associated with stronger engagement on a daily basis. In addition to the average comparison exercise, the correlation analysis reveals significant relationships between the variables. Mean strength correlations are also observed between environmental actions and each of the employability indices (general interest in skills: 0.539, internal training: 0.504, academic training: 0.411)<sup>6</sup>.

<sup>5</sup> SD= Sustainable development

<sup>6</sup> Rating scale: index between 0 and 0.35: low correlation, between 0.36 and 0.67: average correlation (Taylor, 1990).

**Table 5** Comparison of mean value, factors vs employability variables (Student t)

SD actions factors		Environment		Social		Economy	
Employability variables		Mean comp.	Corr.	Mean comp.	Corr.	Mean comp.	Corr.
General interest in SD skills	Mostly yes	2.57*	.539**	3.11*	.330**	2.99*	.275**
	Mostly no	1.59		2.67		2.57	
SD Academic Training	Mostly yes	2.48*	.411**	3.05*	.273**	2.94*	.212**
	Mostly no	1.63		2.72		2.60	
SD Internal Training	Mostly yes	2.55*	.504**	3.08*	.302**	3.02*	.306**
	Mostly no	1.62		2.69		2.55	

\*Mean difference significance level:  $p \leq 0.05$ .

\*\* The correlation is significant at the 0.01 level (bilateral).

Employability: Answer each of the following questions about employability to the best of your knowledge (scale from 0 to 3, or 0 = not at all and 3 = a lot). Mostly yes = 2-3 | Mostly no = 0-1.

Actions: How often have you witnessed the following behaviors in your business? (scale from 0 to 4, or 0 = never and 4 = always)

The responses were then isolated according to the propensity of respondents to value sustainable development skills following academic training or through the offer of in-house training. The new "valorization" variable was created, with four categories: 1) valorization of internal-academic skills; 2) valorization of academic training only; 3) internal training valorization only and 4) non-valorization. These categories were generated by selecting combinations representing complementarity or substitution between these valorization methods (Figure 1).

**Figure 1** Complementarity and substitutability of the valuation of skills in sustainable development in an organization according to the source of the training

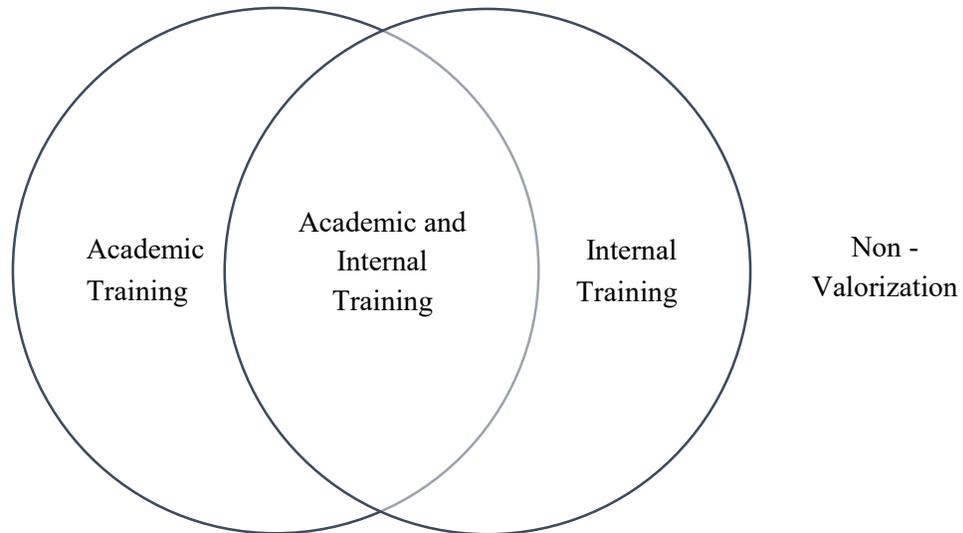
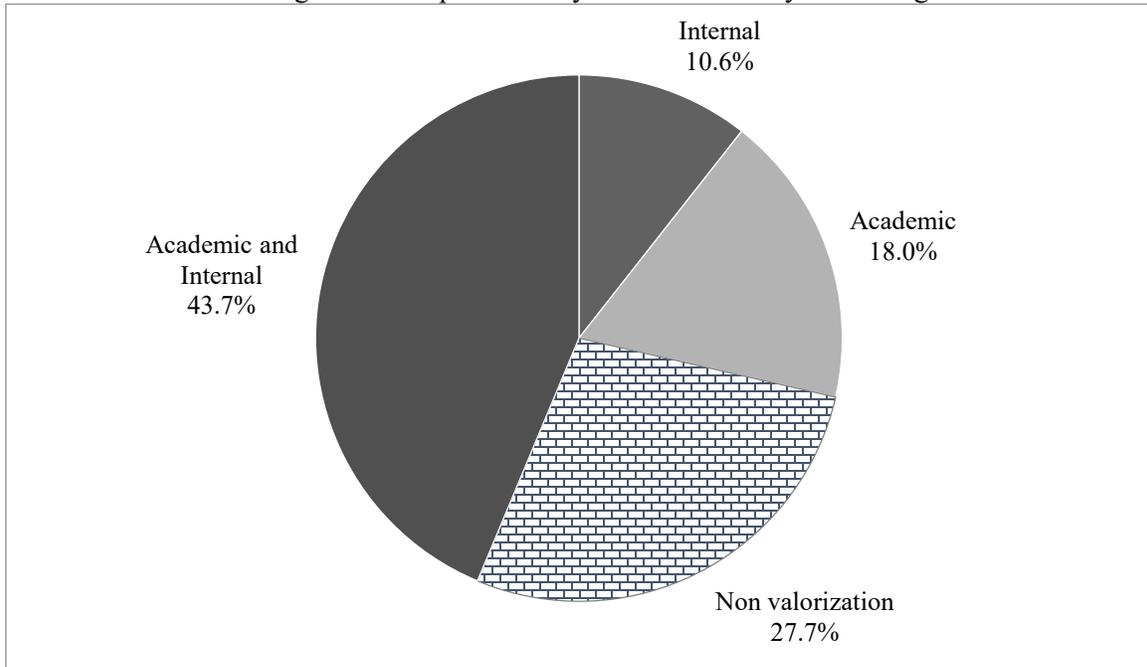


Figure 2 shows that a majority of employers equally value internal training and sustainable development skills acquired during the academic career of a potential candidate (43.7%). Exclusively academic training is valued by 18.0% of the respondents, whereas exclusively internal training is valued by 10.6% of them. In addition, more than one in four employers (27.7%) are not interested in this type of skill. Overall, the results show that there is some consensus on the complementarity between sustainable development skills acquired internally or during academic training.

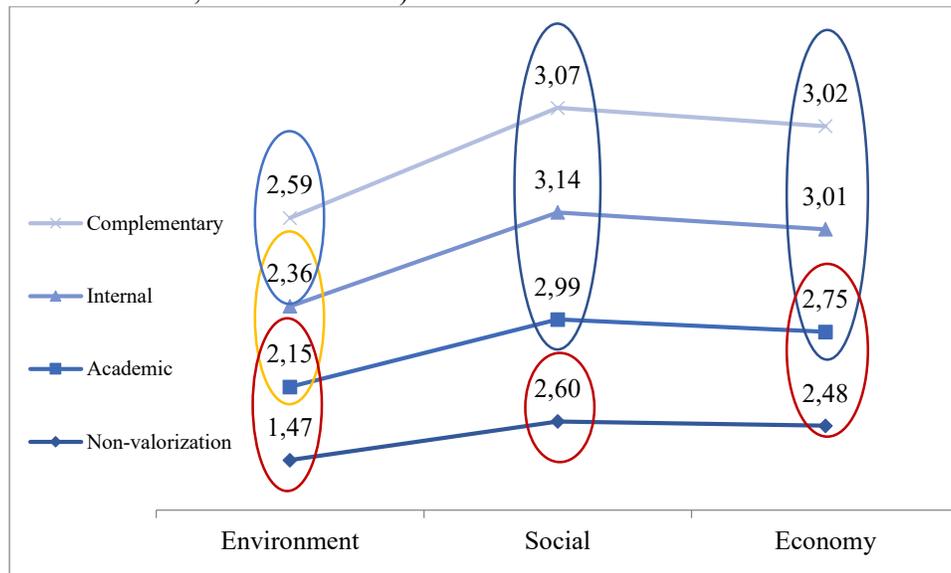
**Figure 2** Distribution of the forms of valorization of sustainable development competencies according to the complementarity or substitutability of training



When comparing the "valorization" variable to the sustainable development actions implemented in an organization using an analysis of variance (ANOVA), several notable findings were observed (Figure 3):

- The highest level of action is associated with the complementary valorization of skills (academic and internal), without being statistically different from the valorization of internal training exclusively.
- Organizations that exclusively value academic training in sustainable development have a statistically lower level of environmental action than those who valorize these skills in a complementary way.
- A lack of valorization of sustainable development skills is clearly associated with a lower organizational involvement in sustainable development actions.
- A similar average in the level of action is observed between organizations that exclusively value academic skills and those that do not value sustainable development skills in the environmental and economic dimensions.
- Independently of whether skills are valorized in a complementary or substitutable way, environmental actions implemented by organizations have the lowest averages, while social actions are the most considered, followed closely by economic commitments.

**Figure 3** Averages awarded to sustainable development actions in an organization according to the valuation of skills in sustainable development (complementary, academic, internal, non-valorisation)



Complementary: n = 202, academic: n = 83, internal: n = 49 and non-valorization: n = 128.

Hypothesis test: H0: = there are no differences between averages; H1: A difference exists between averages.

Mean difference significance level:  $p \leq 0.05$ .

Employability: Answer each of the following questions about employability to the best of your knowledge (scale from 0 to 3, or 0 = not at all and 3 = a lot). Mostly yes = 2-3 | Mostly no = 0-1.

SD Actions: How often have you witnessed the following behaviors in your business? (scale from 0 to 4, or 0 = never and 4 = always)

### *Valorization of Skills According to the Characteristics of the Organization*

For analytical purposes, the data are grouped into categories of variables related to business sector, type of organization and size:

- Primary, secondary and tertiary sectors (based on NAICS code groupings);
- Type: Private (businesses, consulting, self-employed workers), public and parapublic and non-profit (associative, community, educational);
- Small size (1 to 49), medium size (50 to 499 employees) and large size (500 or more employees).

In order to characterize the employability of sustainable development skills as a function of organizations, the new "valorization" variable was cross-referenced to the business sector, the type of organization and the size of the companies. Table 6 shows a significant link between the size of the organization and the form of valorization of skills, where interest increases with size. This translates to small businesses being less sensitive to sustainable development skills, and larger companies that are clearly more likely to value these skills regardless of whether they are developed internally or through academic study. Nuances are also observed for the activity sector. Namely, the closer to the tertiary sector, the less pronounced the complementary interest in the types of training. Respondents in the secondary sector appear particularly not open to candidates academically trained in sustainable development. Finally, organizations in the public and

parapublic sectors are particularly sensitive to the complementarity of sustainable development skills, whether acquired internally or externally. The differences observed for the activity sector and the type of organization are not significant. That said, the deepening of the links between organizational characteristics and the implementation of sustainable development in companies, or valorization of this area of expertise, deserves attention.

**Table 6** Proportion of organizations according to the valorization of sustainable development skills as a function of their activity sector, their organization type and their size\*

Variables	Category	Complementary	Academic	Internal	Non-valorization
<b>Activity Sector</b> Pearson's chi-square = 9.466; df: 6; significance = 0.149	Primary (n = 57)	56.1%	17.5%	7.0%	19.3%
	Secondary (n = 92)	48.9%	10.9%	10.9%	29.3%
	Tertiary (n = 313)	39.9%	20.1%	11.2%	28.8%
<b>Type</b> Pearson's chi-square = 11.856; df: 6; significance = 0.065	Private (For Profit) (n = 262)	40.5%	16.4%	10.7%	32.4%
	Public and Parapublic (n = 89)	53.9%	19.1%	12.4%	14.6%
	Not-For-Profit (n = 110)	42.7%	20.9%	9.1%	27.3%
<b>Size</b> Pearson's chi-square = 20.210; df: 6; significance = 0.03	Between 1 and 49 employees (n = 151)	32.5%	19.2%	8.6%	39.7%
	Between 50 and 499 employees (n = 154)	46.8%	17.5%	11.7%	24.0%
	500 employees and up (n = 157)	51.6%	17.2%	11.5%	19.7%

Hypothesis test: H0: there are no relations between the variables; H1: there is a relationship between the variables;  
Chi square analysis. Level of significance:  $p < 0.05$ .

## 5- Discussion and conclusion

This research work focused on the question of sustainable development skills valorization in the labor market. At the dawn of the 21st century, the importance of anchoring the principles of sustainable development within the philosophy and culture of organizations is increasingly recognized. Until now, a large body of literature has sought to better understand the role that skills can play in sustainable development education. Few studies, however, have sought to explore, from a quantitative perspective, the place of sustainable development skills in an organization. It is this gap that this article has sought to fill by attempting to answer the following two questions: 1) How do organizations value sustainable development skills when hiring? 2) What links exist between the valorization of sustainable development skills and the intensity of sustainable development actions carried out in an organization?

Our results reveal a great propensity for organizations to value sustainable development skills, and most often from a complementary perspective, that is to say, acquired both through the offer of internal training and during academic study. Furthermore, the interest expressed by organizations in sustainable development skills underpins strong daily commitments with a sustainable development approach. Inversely, sustainable development actions are significantly less frequent in organizations that do not value these skills in relation to those that do value them, be it in a complementary, internal or external way. It should also be noted that actions related to the environmental dimension reflected the lowest averages.

More specifically, this research shows that organizations that value the acquisition of sustainable development skills in a complementary way stand out as the most active in their commitments to sustainable development. They display the highest levels of action across the three dimensions considered in the factor analysis: environmental, social and economic. Although there are several similarities between organizations with a complementary perspective toward sustainable development skills and those that exclusively value in-house training, disparities are observed in relation to organizations that exclusively value academic training. On the one hand, the exclusive valorization of internal training in sustainable development underlies a high level of organizational commitment. On the other hand, the exclusive valorization of academic skills reveals a weaker concretization of actions pertaining to the environmental dimension. One potential explanation lies in the eventual need to acquire skills in this area, particularly through the hiring of academically qualified sustainable development personnel, to compensate for organizational delay in implementing concrete actions.

In addition, it is also worth noting some differences in sustainable development action levels depending on the characteristics of the organization. Indeed, a significant association was observed between the size of the company and the form of valorization, reflecting strategic divergences. A majority of large companies tend to value complementary training in sustainable development, while most small businesses do not value these skills, whether acquired internally or during academic training. With the exception of small businesses, the complementarity of skills in sustainable development (internal and academic) is the most widely recognized.

In connection with the *Education for Sustainable Development Report*, a contribution is made to the subject questioning the skills most sought after by employers in the field today. In this regard, this study highlights organizational recognition of the complementarity of acquisition methods of knowledge in sustainable development among potential candidates for employment, both during their academic courses and in organizational internal training. Since purely academic skills are more valued by organizations that are not very advanced in their sustainable development approach, it can be hypothesized that it is in universities that a person can develop sufficient skills to launch and implement a sustainable development approach in an organization.

The results thus raise the need to deepen the understanding of the vectors of organizational commitment to a sustainable development approach, and the potential levers of success in various types of organizations. Indeed, research perspectives are thus offered to deepen knowledge regarding the role of employee skills in the creation of corporate sustainable development strategies and their effective implementation.

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