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HOLISTIC EDUCATION, TRANSFORMATIVE LEARNING AND SUSTAINABILITY MINDSET IN A BUSINESS SCHOOL

A case study of a Brazilian Jesuit university

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Introduction

Over the past several years, Brazil has faced massive economic, social and environmental problems. On November 5, 2015, the breakdown of a dam owned by Samarco, a joint venture between Brazilian Vale and Anglo-Australian BHP Billiton, in Mariana, state of Minas Gerais, discharged 60 billion liters of iron mining tailing along more than 500 kilometers in the Rio Doce basin, the fifth largest river in Brazil. This was the biggest ecological disaster in Brazil's history.

The country that has hosted the Earth Summit in 1992 and Rio+20 in 2012 shows that it is still far from reaching a condition of sustainable development. In this crisis context, it's important to emphasize the role and impact of organizations. For Kevany (2007), corporations are quickly becoming the highest force in society; businesses have replaced the prominent role held by religious institutions in the past due to their power over financial and technological resources, their political ability and their ability to coordinate people. For the author, "the lack of sustainable practices reveals ubiquitous value-action gaps" (Kevany, 2007, p. 109).

The sustainability problem is related to the destabilization of societal value orientations or worldviews (Egmond and Vries, 2011). For Egmond and Vries (2011), the worldview is defined as a combination of a person's value orientation (the question about the importance of certain things and themes over others; they are subjective and refer to a certain chosen quality of life) and his or her view on how to understand the world and the capabilities it offers, the lens through which the world is seen.

To reach sustainable development, we may need a mindset shift, including a change of values, attitudes and behaviors (Leiserowitz, Robert e Thomas, 2004; Garrity, 2012). For Kevany (2007, p. 116), "if corporate leaders remain uneducated

about sustainable development, progress toward sustainable development will be thwarted. Higher education is vital to equip current and future business leaders with insights and skills essential for their pivotal positions in society.”

Education can play a crucial role in changing the next generation’s values and mental models. Given that the current growth model is no longer benefiting humanity (Garrity, 2012), new competencies are required to encourage learners to act as responsible citizens who operate with self-awareness, mutual respect and social responsibility within the global context (Kevany, 2007). Blake, Sterling, and Goodson (2013, p. 5348) state that “the role of higher education in shaping the leaders of tomorrow and nurturing graduates equipped to act in future scenarios is arguably one of the central issues facing the sector.”

Among the various strategies that business schools might mobilize to educate future managers, the pedagogical approach of transformative learning operates at deeper levels of knowledge (Sterling, 2011; Blake et al., 2013), which aims to foster individual, organizational and social changes. It is therefore appropriate to develop more sustainable practices and a new mentality (Blake et al., 2013).

A sustainability mindset is increasingly vital in today’s world. It offers a systemic approach that goes beyond technical knowledge and focuses instead on a broader understanding of the overall ecosystem and society (Van Lopik, 2013). A sustainability mindset can contribute to a new style of management education: one that incorporates ethics and prosperity into our economic, social and natural living system (Akrivou & Bradbury-Huang, 2015).

Following Kumar (2015), we must recover a sense of wholeness when it comes to education, to ensure our integral development as human beings. We believe that holistic education, which integrates hands (doing), head (thinking) and heart (being) (Kumar, 2015), is vital to developing future sustainable leaders.

This book chapter analyzes a business administration undergraduate program, called GIL (*Gestão para Inovação e Liderança* – Major in Management for Innovation and Leadership), which is offered at *Universidade do Vale do Rio dos Sinos* (UNISINOS), a Jesuit university in southern Brazil. The program aims to develop a sustainability mindset among students, via interaction with various stakeholders. This chapter explores the program as a case study, aiming to answer the research question, “How to develop the sustainability mindset among management students, using holistic education and a transformative learning pedagogical approach?” To answer this question, we studied the differences of the pedagogical approach from the management education mainstream, as well as the competencies and sustainability mindset that were developed in management students as a result.

This chapter is structured as follows. First, we present and discuss the concepts of a sustainability mindset and of holistic education. Next, we explore transformative learning as applied in management schools, including its aim to change students’ worldviews by exposing them to new values. This is followed by a presentation of the methodology that has been used in this research. Last, we discuss the results of our findings and the implications for future studies.

Sustainability mindset and holistic education

The success of an organization is related to its engagement with the environment in which it operates. It is important to consider the well-being of the organization's employees, the financial status of its customers, the strength of the communities in which it operates and which it serves, and the health of the biosphere involved (Kassel, 2014).

Meadows (2006) points out that the revolution toward sustainability must be guided by the vision of a sustainable society, of networks of people with shared values, of speaking the truth, of learning and of love for humanity and nature. Knowing this, it is crucial to develop in future leaders a profound holistic mentality that considers each management decision in terms of its social and environmental impact: a sustainability mindset.

The sustainability approach to learning goes beyond technical knowledge and leads to an understanding of the ecosystem and society that is simultaneously broad and deep (Van Lopik, 2013). With its deeper perspective, the sustainability mindset is a new way to think about the social and environmental aspects of the world around us, through the development of social sensitivity, self-awareness and connection with purpose (Kassel, Rimanoczy, and Mitchell, 2016).

For Kassel, Rimanoczy, and Mitchell (2016, p. 8), a sustainability mindset is

a way of thinking and being that results from a broad understanding of the ecosystem's manifestations as well as an introspective focus on one's personal values and higher self, and finds its expression in actions for the greater good of the whole.

According to Rimanoczy (2014), one of the factors that motivates leaders to act from a sustainability mindset is spirituality. For the author, the sustainability theme in management education too often focuses on processes and rational facts, while forgetting to consider the spirituality and values that motivate sustainable actions. Rimanoczy's 2010 research found that spiritual elements are crucial factors that drive the personal mission and social sensibility of leaders.

In terms of the personal mission, spirituality – especially in secular terms – drives the need to act, to make a personal contribution, to achieve life dreams and to make a difference. When it comes to social sensibility, spirituality is related to awareness about “their lives, their contribution to the problem, and their role” (Rimanoczy, 2014, p. 105). Spiritual intelligence is thus a key factor to help us face the essential theme of sustainability in this century (Stead & Stead, 2010; Rimanoczy, 2014).

For Zohar (2005), great leaders are those we can appreciate intellectually, emotionally and spiritually. Besides the financial capital to create sustainable enterprises, Zohar (2005) believes that leaders need two other forms of capital: social and spiritual. Spiritual capital is for Zohar (2005) a new paradigm that requires a radical change of mindset about “the philosophical foundations and practices of leadership

in business. . . . I mean the power a leader can unleash in individuals or organizations by evoking people's deepest meanings, values, and purposes" (Zohar, 2005, p. 46).

Spiritually intelligent leadership can be fostered by applying 12 principles:

- Self-Awareness*: Knowing what I believe in and value, and what deeply motivates me;
 - Spontaneity*: Living in and being responsive to the moment;
 - Being Vision and Value-Led*: Acting from principles and deep beliefs, and living accordingly;
 - Holism*: Seeing larger patterns, relationships, and connections; having a sense of belonging;
 - Compassion*: Having the quality of "feeling-with" and deep empathy;
 - Celebration of Diversity*: Valuing other people for their differences, not despite them;
 - Field Independence*: Standing against the crowd and having one's own convictions;
 - Humility*: Having the sense of being a player in a larger drama, of one's true place in the world;
 - Tendency to Ask Fundamental "Why?" Questions*: Needing to understand things and get to the bottom of them;
 - Ability to Reframe*: Standing back from a situation or problem and seeing the bigger picture; seeing problems in a wider context;
 - Positive Use of Adversity*: Learning and growing from mistakes, setbacks and suffering;
 - Sense of Vocation*: Feeling called upon to serve, to give something back.
- (Zohar, 2005, p. 47)

Educating future leaders for spiritual intelligence is part of holistic education and seems to be one important root for the sustainability mindset. The spiritual dimension of education dates from the ancient Greek civilization through the Paideia model (Jaeger, 2013). This educational model was based on spiritual and historical dimensions of the human being, which allowed the influence of Greeks throughout the centuries. For Jaeger (2013), Paideia was the education of arts recognized as philosophy, poetry, eloquence, being thus the capacity to foster the human being in his genuine and perfect form, the true human nature. The Greeks' understanding of nature has its origin in the spiritual constitution, where the parts belong to a whole organized by the living connection, in and through which everything gained connection and meaning (Jaeger, 2013).

Satish Kumar is the founder of one of the main contemporary educational references on sustainability, Schumacher College (Blake et al., 2013), located in Totnes, UK. For Kumar (2015), education should integrate the spiritual dimension, to develop new leaders and to advance beyond the outdated role of getting students to pass exams so they can find jobs and earn money. "The meaning of the word 'education' is to bring out what is already there, the potential of every student.

Every soul has its own built-in intelligence. Knowledge and wisdom are intrinsic to soul” (Kumar, 2015, p. 111).

Demajorovic and Silva (2012) note that management programs are usually focused on combining resources to achieve maximum productivity and profitability. Paulo Freire, one of the most influential pedagogy thinkers of the 20th century (Gerhardt, 1996), denounces the predominance of “banking education” that aims to deposit knowledge in students while canceling or minimizing their creative power, stimulating naivete and an uncritical viewpoint (Moreira, 2014).

According to Kumar (2015), we must recover a sense of wholeness when it comes to education, to ensure our integral development as human beings. “Education should be about training head, heart and hands, developing the power of thinking, feeling and doing. . . . Education is about finding out who you are and becoming your true self” (Kumar, 2015, p. 114).

In terms of “hands,” Kumar emphasizes that our educational system has given exclusive value to working with ideas, theories and concepts. He likewise highlights that intellectual occupations provide only a limited number of jobs, and advocates for a return to “hand skills.” The heart dimension, in education, is to learn “to be respectful, grateful, compassionate, generous, and caring. Furthermore, learning to deal with your emotions, feelings, anxieties and uncertainties” (Kumar, 2015, p. 119). To contribute to a holistic education, per Kumar, students must learn from nature. Universities and schools could thus be built in open fields and forests, surrounded by nature and bringing students outside of the classrooms.

Holistic education in business schools goes beyond mainstream contents, considering the integral dimensions of human beings, and connecting students to other areas of knowledge. Closs, Aramburu, and Antunes (2009) suggest that new themes and expertise could be integrated into management education such as the value of subjectivity; contextualization of information that makes sense; importance of philosophy and history, among other humanities, such as culture and art; reflections on social responsibility and sustainable development; constancy of uncertainty; solidarity, in order to generate possibilities for survival; and ethics. According to the authors, it is necessary to look for new educational models and methods that allow the transformation of the thinking and treatment of the ethical, political, social and environmental dimensions.

In response to this challenge, the pedagogical approach of transformative learning can be helpful in building the sustainability mindset, amplifying students’ worldviews through the expansion of consciousness, as it acts on the deepest levels of knowledge (Mezirow, 1994).

Transformative learning in education for sustainability

Education for sustainability aims at developing students’ decision-making skills that consider environmental, social and economic implications within a holistic approach. It is a new perspective, based on critical thinking and reflection of human aspects, as a path to help students act and change (Sidiropoulos, 2014).

The pedagogical model addressed in this chapter's case study is transformative learning, an interactive method of teaching and learning to develop an understanding and respectful relationship with nature (Kevany, 2007). It offers a theoretical approach that contributes to the creation of a new education for sustainability (Blake et al., 2013; Lange, 2004).

Introduced by Mezirow in 1978, transformative learning became a foundational theory of learning in adult education (Groen, 2010). Mezirow points out that transformation can occur when an individual critically recognizes that his perspective is no longer functional and decides to appropriate a new, more valuable perspective. The individual then reorganizes the way she looks at herself and her relationships, enabling her to change the situation by her own initiative (Mezirow, 1978).

Transformative learning helps us to critically question and reflect on our own actions and beliefs. Essentially, it is a rational process in which we recognize that our worldview is limited, is ineffective to explain new experiences, and does not fit anymore. "Transformative learning takes place when this process leads us to open up our frame of reference, discard a habit of mind, see alternatives, and thereby act differently in the world" (Cranton and King, 2003, p. 32). The essence of transformative learning is a fundamental change in how people see themselves and the world.

Experiences that can help promote transformative learning include living in community and group dynamics, a diversity of pedagogies, learning and co-creation, and spaces that allow for moments of epiphany or inspiration. Among the pedagogical methodologies are field work and use of the external environment, questions and discussions, lectures, group work, experiential work, audiovisual support, art and craft activities, games/simulations, individual investigations and theater (Blake et al., 2013).

Sterling (2011) observes the importance of the main influencers of transformation: the educator, who is oriented to transform the apprentices' worldview, the student, and the learning environment. The student is an active agent in this pedagogical approach, since the openness and preparation of learners to participate in this internal change and transformation is propaedeutic. The learning environment goes beyond the classroom walls, aggregating experiential methods and bringing about a new concept of the world for students. "Transformative learning arises from the interaction between the state of readiness of the learner and the quality of the learning environment to yield a particular learning experience as an emergent property of that interaction" (Sterling, 2011, p. 27).

To develop a sustainability mindset, students should interact with collaborative projects as an opportunity to develop social sensitivity, self-awareness, ecoliteracy and connection with purpose, as well as to discover the satisfaction and self-confidence that can emerge from meaningful work. Individuals develop their skills to work in teams, and their self-confidence is enhanced as they see how they are able to become proactive at shaping a better world (Kassel et al., 2016). The "hands" dimension connects the students with real-world circumstances, exposing participants to the social dimension of humankind. According to Marquardt (2000), action learning puts learners in front of real problems, brings commitment to action,

developing the leadership skills that are required for the 21st century as systems thinker, change agent, innovator, servant, polychronic co-ordinator, teacher-mentor and visionary.

Considering the aims of education for sustainability, the transformative learning approach uses projects, techniques and tools to help students question and reflect on their own beliefs and values. Sterling (2011) noted that learning can take place at different levels of knowledge and meaning, and transformative learning acts in the deepest levels, not always conscious, influencing ways of thinking, knowing and acting.

The first level of learning does not interfere with the value system and is related to the external objective world. The second level of learning is more challenging, concerned with doing better things, and generates a critical examination of the learner. This level of learning may change beliefs, values and assumptions, and thus is considered a deeper level of learning. The third level of learning relates to epistemic learning, which generates a change in epistemology: how the person knows and thinks, generating a shift in the worldview (Sterling, 2011). Thus, to change the worldview, an epistemic transformative learning is necessary. Sterling (2011) points out that the levels are cumulative: the second order of learning changes the thought and action, while the third order changes all levels of knowledge.

Lange (2004) notes that transformative learning is not just an epistemological process that involves changing a learner's worldview and thinking. It is also an ontological process, where participants expand their sense of self and identity and change their position of being in the world, establishing a new way of relating with their material, social and environmental reality, becoming active citizens with social responsibility. Changing students' worldview – through new values that impact their thinking, doing and being – lies at the core of the transformative learning approach.

This chapter analyzes an undergraduate program in business administration, with an emphasis on innovation and leadership, offered at a Jesuit educational institution guided by humanist values. This program aims at developing a sustainable mindset in management students and a comprehension of leadership in business that goes beyond the mainstream, embracing the roots of the Jesuit culture. Leadership, in the Jesuit philosophy, is characterized by four pillars: self-awareness, ingenuity, love and heroism (Lowney, 2015).

Self-awareness is the ability to reflect on one's own worldview, values, strengths and weaknesses, in order to constantly improve and learn. Ingenuity is the consideration of new possibilities, while self-reflection allows us to contact our inner fears, motivations and attachments that can influence and control our decisions and actions. Ingenuity is “a mix of boldness, adaptability, speed and good judgment” (Lowney, 2015, p. 128).

Lowney (2015) goes on to state that love is manifested in actions, and encourages the engagement of others through a positive attitude. The principle of love allows us to “create environments bound and energized by loyalty, affection, and mutual support – places marked by ‘greater love than fear’” (p. 42). It also allows us to seek to “see the talent, potential and dignity of every person” (p. 182).

The Jesuit concept of heroism is not restricted to the idea of a lonely “leader-hero.” Rather, it emphasizes the role of leaders as active agents to shape the future and help develop the “unique links that unite a team” (Lowney, 2015, p. 191). The leader’s overarching role is to “influence those who cause the greatest impact on society” (p. 227).

A knowledge of the principles that guide Jesuit philosophy on leadership is fundamental to understanding the institutional culture that serves as a backdrop to the pedagogical approach studied here. To develop a sustainable mindset through a change in students’ worldview, it’s also important to understand the values of the educational institution and ensure coherence with its pedagogical philosophy. In the next section, we will describe the methodological procedures that have guided our research in the management program and its results.

Methodology

As noted, this chapter explores the case study of a pedagogical approach to develop a sustainability mindset in students at UNISINOS, one of Brazil’s largest private universities. Our analysis focuses on the pedagogical approach used in an undergraduate program on business administration, called GIL (*Gestão para Inovação e Liderança* – Major in Management for Innovation and Leadership).

A case study, per Yin (2001), is carried out through the direct observation of the study object and through a systematic series of interviews. We applied a participatory action research method, where the respondents are both subjects and collaborative participants in the research (Kemmis & McTaggart, 2007; Thiollent, 2005), to answer the main question of this study: “How to develop the sustainability mindset among management students, using a holistic education and a transformative learning pedagogical approach?”

For this case study, we interviewed students, professors and other stakeholders, including: (1) JAMA Institute, focused on the sustainability of third sector organizations and (2) *Primeiro Saque* Social Project (‘First Serve’ Social Project), an NGO oriented toward child education in high-vulnerability areas. Interviewees involved in the process of the educational approach implementation are identified as E1 (professor), E2 (program coordinator), E3 (manager of social project) and E4 (manager of JAMA Institute). Interviewees E5 to E14 are students who have participated in GIL’s pedagogical approach. Institutional documents and the program’s websites were analyzed in the data research.

The data analysis was based on Bardin’s (1994) perspective and on Kumar’s (2015) three dimensions of holistic education: head (thinking), hands (doing) and heart (feeling). To Bardin (1994), there are three levels of data analysis: (1) pre-analysis (e.g., preparation of material for analysis); (2) material exploration (e.g., data codification to achieve a content representation); and (3) treatment of results, inference and interpretation (e.g., statistical operations and the use of test results with theoretical and pragmatic purposes, or the orientation of these results to a new analysis).

Results

In this section, we share the results of the data analysis through the description of the pedagogical approach implemented in the management program, the competencies and sustainability mindset developed in the students, and the perceptions of those involved in the educational process as students, professors and stakeholders.

The pedagogical approach implemented in the GIL management program

GIL is one of 81 undergraduate courses offered at UNISINOS and taught by UNISINOS Business School (one of six schools at the university). More than 30,000 students currently take undergraduate, graduate and continuing education programs at UNISINOS.

The GIL program started at the São Leopoldo campus in the first semester of 2003. After eight years, it is now also offered at the campus in Porto Alegre, the largest city in Brazil's southeastern state of Rio Grande do Sul. Fonseca and Daudt (2007) assert that "the launch of GIL represented an important effort for UNISINOS to become a reference in some areas (including Management)" (p. 3). Nearly 200 students have now graduated from GIL's program and are working in various sectors of the national and international industry.

The program's distinguishing features cover different areas: curricular exchange programs (graduates study for a semester at a foreign university, in countries like Canada, USA, Germany, Portugal, South Korea, and Spain); English language training; emphasis on communication and expression; technological resources; integration with companies; investigative approach; continuous updating of the knowledge involved; and its process for the assessment of students in the program, individualized monitoring and career planning.

GIL's learning environment also differentiates it from all of the other major programs at the university. At GIL, small groups of around 15 students study together in a full immersion program. They meet for classes and study for the first two years in both the morning and in the afternoon. This is different from other management programs in Brazil, in which classes are held only once a day, in the morning or evening. The class configuration focuses on working groups, and teachers are enabled to change the layout of tables and chairs to best serve their pedagogical purpose. Teachers are also encouraged to organize activities outside of the classroom. Students visit companies as real-life case studies, participate in important events and conferences and may be in contact with entrepreneurs from Brazil and abroad, all with the support of the program coordinators.

To develop a sustainable mindset in management students and to create opportunities to learn beyond the classroom with entrepreneurial leaders, GIL develops partnerships with organizations from different economic sectors. Since January 2016, GIL has an institutional partnership with JAMA Institute, which counts among its founders a major telecommunications entrepreneur from southern

Brazil, who is partner and emeritus president of RBS (*Rede Brasil Sul*) Group: Jayme Sirotsky.

For several years, Sirotsky had developed a personal practice of helping young people to go to university, through scholarships and donations. In 2009, he saw the need to professionalize this and to monitor the process of donations, as well as to measure the sustainability of benefits in the social projects he supported. For this purpose, Jayme Sirotsky, along with his wife and three sons, founded the JAMA Institute. JAMA is a non-profit association, which seeks to help children and young people in gaining access to good education, both in primary and secondary school and at the university level. Since its inception, the Institute has invested around R\$ 1,000,000 per year (approximately US\$ 350,000) in social projects. Among the initiatives developed and supported by the Institute, there is a project developed in partnership with GIL. The partnership includes the yearly donation of R\$ 20,000 (equivalent to US\$ 5,000) to support the interaction of management students with an NGO focused on civic education for children.

The NGO that was chosen by JAMA Institute for interaction with students of GIL is *Primeiro Saque* Social Project ('First Serve' Social Project). It was founded by the professional tennis player Matheus Triska and, through sports, promotes the social inclusion of children living in vulnerable conditions in the city of Canoas, district of Niterói (also in the state of Rio Grande do Sul). Since April 2015, the NGO has offered tennis, yoga, mindfulness practice, cultural workshops and counseling to children. The project serves 40 children between 6–12 years and focuses on objectives like strengthening self-esteem, as well as fostering a sense of belonging and personal responsibility.

The NGO's work to promote children's empowerment is based on the values of love, compassion, discipline, freedom, respect and autonomy – aiming to develop and value the potential of every child. For this to happen, the management of the third sector organization needs to be evaluated systematically. With this purpose, JAMA Institute indicated *Primeiro Saque* to partner with GIL. Non-profit organizations often lack technical support in financial management; thus, this partnership provides both students and the NGO with an important opportunity to exchange knowledge and practical advice in a real-world situation.

Among the objectives of the partnership is to allow GIL students to approach management theory in practice by contributing to *Primeiro Saque's* management, as well as to develop socio-emotional skills that are needed for a sustainable mindset and for social and environmental responsibility.

The GIL courses that interact with these two different stakeholders – JAMA Institute and *Primeiro Saque* – on this innovative pedagogical approach are 'Learning to Learn' (which we followed in the first semester of 2016) and 'Social Project' (which we followed in the second semester of 2016). The two classes are coordinated by the same professor and each carry a workload of 30 hours. It's important to highlight that these disciplines are offered in the first year of the program, and that management students are usually 17–18 years old.

The program of the first semester, 'Learning to Learn,' aims to awaken in students the importance of continuous learning and their individual responsibility in this process, as well as understanding the ways of learning, developing their self-awareness and learning in action. The 'Social Project' discipline, in the following semester, aims to introduce the concepts of social entrepreneurship, social innovation and the management and funding of third sector projects.

Due to the flexibility of the program, which is one of GIL's differentiating characteristics, the classes of the 'Learning to Learn' discipline on the first semester were organized as one meeting per month, for a full day. This allowed students to visit the third sector organization, which is located 20 kilometers from the university, and to interact with the children beneficiaries of the social project. In the second semester, students from GIL and the social project travelled to another city, Florianópolis, financed by the partnership with the JAMA Institute. Located 500 kilometers away from the university, Florianópolis is considered the capital of social innovation in Brazil. Table 11.1 presents the schedule for the teaching plan and the actions that were implemented on both disciplines.

Through this teaching plan and the actions of the pedagogical approach implementation, it's important to note the role of the teacher of the disciplines, who acts beyond the classroom; the role of stakeholders, who are engaged in the process of teaching and learning; and the role of the GIL's coordinator, who is personally involved in the process. Thus, the pedagogical approach is implemented with the contribution and engagement of all participants and stakeholders, creating an innovative learning environment in accordance to Sterling (2011), who notes the importance of the main influencers of transformation: the educator, the student, and the learning environment. Students' contact with real-world situations, action and experiential learning, reflection on all meetings, and contact with different entrepreneurs and leaders also stand out in this methodology. The next section will analyze the characteristics of the pedagogical approach, according to students, professor, program coordinator and other stakeholders.

Characteristics of the pedagogical approach to develop a sustainability mindset

The first dimension of this research was the characteristics of the pedagogical approach applied in GIL. According to students, professor, program coordinator and stakeholders, the main aspect of the pedagogical approach is the connection of theory and practice. For student E7: "with this methodology we learn beyond theory, we learn through practice." E8 says that "we have the opportunity to learn hands-on." For E9, "the interaction with the social project enables the development of competencies which wouldn't be possible in the theoretical dimension alone."

In fact, all students confirmed that one of the main differentials of business schools is when theory is allied with practical experiences, building bridges with the real world. "Study and acquire knowledge in a more dynamic and efficient way" (E14). "It's necessary to learn from theory and from living experiences, where we

TABLE 11.1 Teaching plan and actions implemented on ‘Learning to Learn’ and ‘Social Project’ disciplines

First semester ‘Learning to Learn’ discipline

January 2016	First visit by the teacher of ‘Learning to Learn’ discipline to <i>Primeiro Saque</i> social project, in order to establish a first contact, understand the project needs, establish the first academic ties and plan initial actions. The teacher was able to observe the activities of the social project with children: arts, meditation and tennis lessons. The first bonds with the social project manager and team leaders were formed as a result of this visit.
February	Alignment meeting of 2016 first semester with the manager of JAMA Institute and the manager of the <i>Primeiro Saque</i> Project.
March <i>First and second classes</i>	First meeting with management students, who were introduced to the concept of ‘learning to learn’ in leadership and management and the importance of self-awareness. Different group dynamics and readings of philosophical texts (Seneca’s “Learning to Live”) were implemented in this meeting, to stimulate reflection.
April <i>Third and fourth classes</i>	Meeting of management students with managers of social project and JAMA Institute, where they presented their organizations and cases. In the afternoon, GIL students visited the <i>Primeiro Saque</i> headquarters, learning about the main difficulties in different areas of management (human resources, financial, pedagogical) through a diagnosis. Students suggested improvements and feasible actions, with the teacher’s support. Thus, students in the first semester of the program are encouraged to develop their diagnostic skills, socio-emotional skills such as empathy and collaboration, and to learn by doing in contact with reality. Start of the fund-raising and crowdfunding project.
April	Visit to the Guga Kuerten Institute in Florianópolis by the GIL instructor, the manager of the JAMA Institute and the manager of the <i>Primeiro Saque</i> Project. The purpose of the visit was to do a benchmarking against one of the main social organizations in Brazil that educates children through sports, and to plan the study travel of GIL students and children of the social project in October 2016.
May <i>Fifth and sixth classes</i>	Meeting of management students with children of the social project. GIL students had to organize the interaction with children through the theme ‘learning to learn.’ Different activities were implemented, such as creating a sustainable garden using PET bottles, experiencing sowing seeds. In the afternoon, GIL students, accompanied by the manager of the <i>Primeiro Saque</i> social project, visited a third sector organization with more than 30 years of existence and a vast experience on management on education for children living in vulnerable areas. Benchmarking and a case study were done on this visit.

First semester 'Learning to Learn' discipline

June <i>Seventh and eight classes</i>	Seminar presentation by GIL students. In groups of two, management students had to present (after reading a biography and papers) the case of entrepreneurs and leaders through the lens of 'learning to learn' and investment in social projects. In the afternoon, GIL students hosted children of the social project at the university, and did a tour of UNISINOS together, as well as other activities. They visited the technological park, the library, the sports center, and did group dynamics for integration.
June <i>Ninth class</i>	Visit to the RBS Group and meeting with JAMA Institute founder, Jayme Sirotsky.
July	Meeting among the professor of the disciplines, the coordinator of GIL program and the manager of JAMA Institute to plan the second semester. Meeting with the professor of the disciplines, the manager of JAMA Institute and the manager of <i>Primeiro Saque</i> social project to plan the second semester.

Second Semester 'Social Project' discipline

August	Visit to Florianópolis by the professor of the disciplines, the coordinator of GIL program and manager of JAMA Institute, in order to plan the study travel and to contact social business and social entrepreneurs that will interact with GIL students.
September <i>First class</i>	Introduction of concepts of sustainability and sustainable development, social business, social responsibility, social entrepreneurship, new capitalism.
September <i>Second class</i>	Presentation of documentary seminars by management students, aiming to develop a deep reflection on the themes around sustainability.
September <i>Third class</i>	CANVAS workshop: strategic planning of <i>Primeiro Saque</i> social project.
October <i>Fourth Class</i>	Seminar 'Social Business around the World.' Students present, in a seminar, research done on two cases of social business situated in different countries and continents (Brazil and other countries of South America, Central America, North America, Europe, North Africa, South Africa, Oceania, Russia and countries of the Ex-Soviet Union, Asia).
October <i>Fifth to eight classes</i>	Visit from GIL students to the business and social projects in Florianópolis. Visit of children of the social project to the "Guga Kuerten Week", a huge tennis festival. They had the possibility to meet Gustavo Kuerten, one of the most recognized tennis players in the world.
October <i>Ninth class</i>	Visit to <i>Escola Ayni</i> , a social and educational project managed by a young leader that aims to contribute to a new education.
November <i>Tenth class</i>	Presentation of the <i>Primeiro Saque</i> project's strategic plan, performed by GIL students, to all stakeholders involved in the pedagogical process.
November <i>Last meeting</i>	Event organized by students where they show the results of the pedagogical approach to the university community (professors, other students, parents, etc.).

can put into practice what we learn. This is the best way to really learn something” (E12). Learning by doing is seen, by all interviewees, as a differential of the pedagogical approach that resonates with the holistic education proposed by Kumar (2015), for whom one of the pillars is ‘hand’ learning. In addition, E4 believes that learning is improved when it is pleasurable. “Students demonstrate a thirst for knowledge. They are interested and proactive and they want to put their hands to work.” In this way, the role of the students changed; they are not forced to sit in the classroom, but are instead engaged with the purpose of the project.

Students saw case studies as another differential, whether they studied through reading books or by visiting the case studies in person. For E9: “the methodology brought case studies from successful entrepreneurs from different areas, and all of them invest in social projects, which makes it more interesting for the students.” In addition, E11 said “the opportunities of socializing with the children of the social project and entrepreneurs with extensive experience are the main differences of the methodology, because we were face to face with challenges and opportunities of a different type of learning.”

For the program’s coordinator, “the partnership between GIL and JAMA institute strengthened the ‘learning in practice’ by the students’ empowerment” and “the students, even if they are in the first year of the program, planned and carried out actions which led to the development of important management competencies.” According to the professor, E1: “The differential is in the transformative learning approach, which works at the deepest levels of knowledge and puts students constantly in touch with practice and with the real world.”

Beyond that, E1 saw that action learning and social learning were efficient tools that contributed to transformative learning, as are the engagement of the professor, the connection with other disciplines and the support of the program coordinator to implement this pedagogical approach. This is in accordance with Sterling (2011), who highlights the importance of different influencers in the learning process. Stakeholders see the differences of the pedagogical approach mainly in the engagement of all the partners that are involved in the experiences and activities.

E4 talked about the role of professors and managers of the program: “It’s important to highlight the humility of the professors and managers of the program, being open to listen to stakeholders, and to learn. By doing so they become a reference to students.” In addition, E4 emphasized the openness of the University: “Other universities identify the importance of innovating their pedagogical processes, but not all have a culture open to this kind of partnership. According to E4, “UNISINOS, through the management program GIL, has a differentiated and practical curriculum, and also a culture of innovation that has facilitated the implementation of this different methodology.” Thus, beyond the openness of those that are directly involved in the partnership, the culture of the educational institution contributes to the implementation of innovative pedagogical approaches. Being a Jesuit university, the values and philosophy of the institution contribute to an open culture, with a new view of leadership (Lowney, 2015).

According to E4: “If Brazil and other countries need new leaders, it’s necessary to change the traditional education to follow this new world that changes every day.” To meet this challenge, E4 believes that it’s necessary that different stakeholders join forces for the purpose of education. It’s important to observe that partnerships were built not just with external stakeholders, but also with internal stakeholders, such as other disciplines of the program.

For the professor and the program coordinator, E1 and E2 respectively, there were many impacts and influences of the new pedagogical approach on other disciplines. E1 considered this new methodology as a “catalyst of interdisciplinary relations” and said: “in the second semester, for example, we have interactions with an English workshop using theoretical texts related to social entrepreneurship, social innovation and social business, to support the activities of the semester, as well as with the discipline of Business Strategy to propose a strategic plan to the organization that students are interacting with.” For E2, “the pedagogical experience gave the courses ‘Learning to learn’ and ‘Social project’ a more central role, connecting with other courses.” E1 added that, to build interdisciplinary aspects into the program, it’s necessary also to build relationships among professors with similar values.

Stakeholders, such as JAMA Institute and *Primeiro Saque*, have seen an impact on their organizations since the project started. Thus, a pedagogical approach that brought different partners together with the purpose of education created a learning environment for everyone. E4 observed that all stakeholders learned together in the process: “we learn, teach and share, because knowledge is only meaningful when shared.” E3, the manager of the social project, noticed the impact on the motivation and behavior of the children in the social project, which also touched their families and schools, and was a contribution to the management of the third sector organization, in the domains of marketing, fund-raising and human resources. E3 underlined that the decisions are taken horizontally, which shows that there is not a hierarchy, and each stakeholder develops its own leadership.

For the manager of JAMA Institute (E4), “the partnership with the University is fundamental for systematization of knowledge for further research and identification of good practices. . . . the results can serve as a future reference in the training of students.” In addition, the interviewee said: “The contact with different realities (UNISINOS and *Primeiro Saque*) was innovative in our partnership. The Institute is the bridge between these different worlds and, in this partnership, everyone wins when each one contributes their expertise.” Thus, to build innovation in education, the role of bridging organizations is important as a stimulator to ‘connect the dots’ between those organizations that are really engaged in the purpose of the partnership – that is, to develop future leaders with a sustainable mindset and with an amplified worldview.

In fact, via the pedagogical approach, students realized the impact on their worldview when they were at the center of the process of learning, as protagonists of this process. E5 said “it was extremely important to change our worldview as a result of facing a different reality. We developed an ethical awareness and an obligation to help the transformation of the world for the better.” Student E12 added: “It

was possible to watch closely the social reality of our environment, also to see the importance of a virtuous individual and the impact it makes on the society.” The contact of young people with a different reality – the reality of a children’s social project – results in the development of ethical awareness. Students recognized the importance of virtuous people, as well as their impact on society.

The change of the worldview is intrinsic to transformative learning (Sterling, 2011; Cranton and King, 2003). For E1: “Transformative learning provides students transformation through the change of worldview and new values.” According to E4, the manager of the Institute that invests in the partnership, one of the main differentials on changing worldviews is to bring students to experience another reality. “The methodology provides opportunities for the students to know the social realities which go beyond the classroom. . . . together, the students get involved in a social cause, where they can learn, exchange experiences and teach.” Being in front of the reality of social vulnerability leads students to reflection, both about their own reality and about their future role as managers. Another dimension of holistic education appears: the thinking dimension, or the ‘head,’ according to Kumar (2015).

Student E12 affirmed: “meeting the children of the project amplified my horizon, creating a more realistic vision of the world. And I think that this will be very useful in our future life as managers, especially knowing from up-close how the management of a third sector organization works.” Students also perceived that being in contact with reality led them to understand that third sector organizations need management, just like for-profit organizations. For E7, “it was important to learn that third sector organizations use a methodology of management as profit organizations do.” For the student E12, “it was possible to obtain a more systematic and practical vision of how an organization really works.” For the student E13, it was important “to perceive that the third sector organization needs good management. Thus, we did a brainstorming to solve some questions of the *Primeiro Saque* project. In addition, we will create a strategic plan for the project, which for sure will add to our learning as future managers.” Thus, management is also learned in the field, putting students in front of the challenges of the third sector organization.

The characteristics of the pedagogical approach led to the development of competencies that contributed to a sustainability mindset. The next section will describe the findings on these topics.

Competencies and sustainability mindset developed through transformative learning and holistic education

Different competencies were developed in the students during the implementation of the pedagogical approach. Improved critical thinking was observed in students’ presentations. One of the pillars of transformative learning is to develop the learners’ critical thinking; Mezirow (1978) asserted that transformation can occur when an individual critically recognizes that his perspective is no longer functional and decides to appropriate a new perspective as being more valuable. According to

student E6, “through discussions about books and articles I could improve my critical thinking and position on different issues.” Student E9 said: “the ability to judge what is best for the project through critical thinking was developed in students and in project managers.” For E12, “experiencing how an organization works allowed me to develop critical thinking.”

E1 affirmed that critical thinking was stimulated, especially rethinking socio-economic conditions and using philosophical authors like Seneca to bring up discussions about the meaning of life. The students’ presentations showed their ability to reflect both profoundly and critically on different topics, including, for example, organizational issues and questions about the meaning of life. Learning from theory, allied to practice, contributed to the improvement of critical thinking in the learners.

Openness to innovation was another skill that emerged in this research. Student E8 affirmed that “we had to seek innovative alternatives at different occasions during the project, because we had fewer resources.” According to E13, “regarding the aspect of innovation, in all meetings through lectures, classes, talks and debates, it was possible to have insights and understanding that small ideas can turn into great solutions. For that reason it’s necessary to put your hands to work.” Bringing action learning to the pedagogical approach facilitated students’ openness to innovation, which corroborates Kumar’s (2015) proposal of holistic education and the importance of learning by doing.

Another competency developed was that of communication. E9 said, “Throughout the semester, the number of interactions with different stakeholders forced us to develop our communication skills. . . . For a manager who wants to become a leader, the ability to teach, express and communicate clearly is fundamental.” Student E12 said: “this discipline gave us a great opportunity to express our feelings.” For student E13: “all these activities have given us a greater ability to communicate.” Students thus recognized the development of their communication skills, for the exercise of management and for leadership.

Leadership and entrepreneurship were other competencies that emerged through this pedagogical approach. E7 affirmed that “leadership and entrepreneurship were being developed in every meeting with the social institutions, through many activities that we had to perform and to plan, also in the fundraising that we engaged.” E9 observed the importance of acting as a leader but also of learning how to be led. For E12, this competency was facilitated not only through the interaction with the social project but also via contact with leaders (i.e., the president of JAMA Institute, one of the main entrepreneurs of the south of Brazil), and by reading leaders’ biographies that were proposed during the course ‘Learning to Learn.’ For E14, “I developed empowerment and self-confidence during this course.” According to professor E1, leadership and entrepreneurship were stimulated, helping the students to take more responsibility for the learning process.

Another developmental goal that was stimulated through the pedagogical approach was self-awareness. For student E5: “Through working with people in a different reality, having to pass some knowledge to them and reading about people

who have actually achieved success in life, we know ourselves better, our strengths and weak points and where we want to go.” This is aligned with Lowney’s (2015) self-awareness principle of Jesuit leadership, as the ability to self-reflect regarding one’s worldview, values, strengths and weaknesses in order to improve and learn constantly.

In addition, student E7 said: “since the first class, self-awareness was considered very important for our personal development. Knowing myself helped me to understand what moves me in this life.” Self-awareness, beyond knowing our strengths, thus has a role in defining our life mission. E13 highlighted the importance of self-awareness that was elicited by the pedagogical approach: “to be a good leader, first of all it’s necessary to know yourself.” According to E1, the professor of the program: “Self-awareness is a goal of the pedagogical interactions.” For the students, sharing knowledge with the children of the social project and analyzing the cases of successful leaders in the workshop were the principal reasons for their improved self-awareness.

Self-awareness is the essence of holistic education. According to Kumar (2015), education means to bring out the potential of every student, and it is about finding out who you are and becoming your true self. Transformative learning enables us to change our worldview. It touches as well on the ontological dimension, where participants expand their sense of self, their identity, and change their way of being in the world (Lange, 2004).

Platonic love emerged as a topic in the students’ interviews, including love for the children of the social project, love for self, and love that developed from the interactions with other management students and with leaders. For E6, “after one week in the program our class became a family, and we could transmit these feelings to the children of the project, which enriched our souls.” E9 talked about the meeting with the founder of the institute that finances the partnership: “it was interesting to see that a man 80 years old with a large fortune still works with love every day.” E13 emphasized the way the manager of the social project relates with children: “the love and affection that he puts into the social project and relates with children is what really moves everything.”

For professor E1, “love permeates the whole process of teaching and learning; especially from the relationship of the teacher with education itself, building bonds of love between student and knowledge.” Love is fundamental to holistic education. The heart dimension of education is to learn “to be respectful, grateful, compassionate, generous, and caring. Furthermore, it is learning to deal with your emotions, feelings, anxieties and uncertainties” (Kumar, 2015, p. 119).

Love awakens students’ social sensibility. For student E9, “the contact with a third sector organization and the knowledge of social actions in practice allows many students to develop their humanitarian sense.” Contact with a different social and economic reality led students to reflect on their own situations and responsibilities, highlighting the ‘heart’ dimension of holistic education.

Love is implicit in social awareness. As noted, in the principle of Jesuit leadership, love is manifested in actions and encourages the engagement of others through a

positive attitude. The principle of love allows us to “create environments bound and energized by loyalty, affection, and mutual support” (Lowney, 2015, p. 42), seeking to “see the talent, potential and dignity of every person” (p. 182).

Among other competencies that emerged, according to E3, manager of the social project, the students “gained more confidence to have autonomy.” All of those interviewed agreed that empathy was one of the main socio-emotional skills developed by the students in the program. Humility, respect and collaboration were other skills and ethical values mentioned in the interviews. Other competencies were “teamwork, patience, calmness” (E5); “persistence” (E6); “proactivity, improvement of interpersonal relations” (E10); “compassion” (E12); “resilience, self-confidence, determination, admiration, empowerment, friendship” (E14).

This research shows that students developed individual competencies, such as self-awareness, communication skills and critical thinking. Yet, most of all, their social sensibility was strengthened through their relationship with different realities; they developed greater empathy, collaborative skills, humility and compassion. Global awareness was also stimulated in students. E8 said: “the sense of collectivism and the perception of the world as a whole is essential for the sustainability of a business. We have developed this capability through knowledge and direct contact with the children involved in the project.”

The altruistic vision was reinforced through the pedagogical approach, creating a stronger collective attitude and a less individualist behavior in the students. These are fundamental components of a sustainability mindset. E6 affirmed that to make decisions it’s necessary to have a broader vision: “decision-making goes through a process of analysis of an entire context. . . . it’s necessary to measure what will be the social and environmental impacts that these decisions would generate.” For E11, “before the interaction with the third sector organization, the concern with sustainability was not on my mind. The world where we live in is far from perfect and if we have the opportunity to do something, it must be done.” For E13, a work proposal or a business model should aim to be more humanistic and sustainable while providing a financial return. The students’ interviews showed a clear comprehension of the different dimensions of sustainability (economic, environment and social).

From the viewpoint of the professor and coordinator: “the student understands that management goes beyond economic results, considering the socio-environmental results” (E1). Regarding the pedagogical goal, it was possible to see “the development of the awareness that it is imperative to mobilize all resources (people, organizations and the world) as best as possible” (E2).

In the other stakeholders’ vision, “this approach encourages a sense of responsibility in students. It facilitates the development of a more sustainable consciousness” (E3). For the interviewee E4: “Looking at the social problems promotes co-responsibility, teamwork, respect for the differences and for diverse ways of thinking.”

E8 asserted that “it is possible to do the ‘impossible’ with few resources.” This shows a shift in management worldview toward one in which it’s not necessary to have a lot of financial, human or other resources to create an organization and

impact a community. E14 observed the importance of investing in education; profit should not be the center of interests when aiming at a better society in the long term. Spirituality emerges here, again, as a necessary element in the sustainability mindset that brings about an awareness of “their lives, their contribution to the problem, and their role” (Rimanoczy, 2014, p. 105).

As noted, various competencies were developed among the students at an individual and collective level, and pointed toward an emerging sustainability mindset. In the next section we present the final considerations and implications for future studies.

Conclusion

A sustainability mindset is a new way to think about the social and environmental aspects of our world, including the development of social sensitivity, self-awareness and connection with purpose (Kassel et al., 2016). This mindset is more and more crucial as we educate future managers and leaders, and we can make a massive contribution to the economic, environmental and social problems that humanity currently faces. Transformative learning is a pedagogical approach that helps in developing a sustainability mindset, due to its impact on the deepest levels of knowledge, including on the worldview of learners (Sterling, 2011) and on the ontological level (Lange, 2004). Allied to transformative learning, holistic education – which aims to integrally develop human beings through the dimensions of hands (doing), head (thinking) and love (being) – can contribute to the development of a sustainability mindset.

In this chapter we presented a case study of an innovative pedagogical approach oriented towards developing a sustainability mindset in management students in the GIL program at UNISINOS. To answer the research question (“How to develop the sustainability mindset among management students, using a holistic education and a transformative learning pedagogical approach?”), we interviewed the management students, the professor, the program coordinator and other stakeholders about the differentials of the pedagogical approach, as well as the competencies that were developed in management students, in terms of the sustainability mindset.

The differentials of the pedagogical approach emerged in the research at the methodological, individual and organizational levels. On the *methodological* level, the differentials are the transformative learning approach; action learning and social learning; case studies, whether studied in books or by visiting entrepreneurs and leaders in person; and methodology allied to practice, which allowed students to build bridges between theory and the real world. On the *individual* level, differentials included the openness of the professor and program coordinator to learn with the process and to listen to stakeholders; interdisciplinary relations in the management program between faculty with a correspondence of personal values; the contribution and engagement of all participants and stakeholders; the change in the students’ worldviews when they are at the center of the process of learning; and students’ empowerment. On the *organizational* level, differentials included the

educational institution being based on a culture of innovation; the role of bridging organizations; impacts and influences of the new pedagogical approach on other disciplines; and learning about the hands-on management of third sector organizations.

The management students developed greater social and emotional competencies, which are necessary for the sustainability mindset. The competencies that emerged from the research included critical thinking, openness to innovation, communication skills, leadership and entrepreneurship, self-awareness, platonic love, social sensibility and global awareness. Other competencies, and also ethical values, appeared: greater self-confidence, autonomy, empathy, humility, responsibility, respect, collaboration, teamwork skills, patience, calmness, persistence, proactivity, improvement of interpersonal relations, compassion, resilience, determination and empowerment.

The altruistic vision was reinforced in this pedagogical approach, creating a stronger collective attitude and less individualistic behavior in the students, corresponding to Kassel et al.'s (2016) conceptual model, where collaborative and innovative action is at the center of a sustainability mindset. All of these competencies helped to develop a sustainability mindset, in which students start to think through the different dimensions of sustainability (economic, environment and social).

It's clear that the deeper purpose of this pedagogical approach as applied to a management program, beyond developing social and emotional competencies, is to develop spiritual intelligence. Kumar argues that true education integrates the spiritual dimension, to integrally develop new leaders. "Every soul has its own built-in intelligence. Knowledge and wisdom are intrinsic to soul" (Kumar, 2015, p. 111).

Research shows that this pedagogical approach can be applied only because all participants (professor, program coordinators and other stakeholders) are embedded in education as a life mission – understanding education not just as a way of building a student's understanding of the content, but as a way to transform people and create a better world. Without this comprehension and without being personally involved, it's not possible to develop a sustainability mindset through management education. To create a new kind of education, and new management practices, it is essential to consider the spiritual dimension.

For future studies, continuous and longitudinal research is recommended, to follow these students and their future practices as managers over several years. This could be a way to confirm the maintenance of the results that were seen due to the implementation of this pedagogical approach. Other research could explore transformative learning practices, as applied in different educational institutions and different organizational cultures, to see the effectiveness of their impact on innovative pedagogical approaches.

Note

- 1 www.unisinos.br/noticias/universidade/unisinos-e-tri

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