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## Integrating Problem-based Learning with International Internships in Business Education

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### ABSTRACT

The literature on international business teaching has contributed to the development of international internships as a learning pedagogy through three key areas: making sense of the students' developed competences and prospective added employment value following their participation in international internships, the role of support structures in the organization of internships abroad, and more recently the pedagogical design of internships abroad. Thus, more recent research has taken a critical stance toward internships as a learning form, as serious gaps exist in the pedagogical elements required to connect internships with the broader theoretical elements of international business programs. The present study addresses these gaps through two research questions: i) How can educators design and implement problem-based international internships in business education? ii) What adjustments does the combination of these two active learning experiences in business education demand for small business schools, partner universities, and hosting organizations? The paper presents pedagogical action research that was conducted over two courses for international business internships in a Norwegian-Brazilian context for bachelor's and master's students. It contributes to the international business teaching literature in the following ways: First, the validated teaching framework argues for international internships that are linked to loosely defined problems at the host organization, which the student self-scopes and connects based on their theoretical knowledge from other courses. Second, by providing an in-depth discussion of problem-based learning and its applicability in international business practicum, we address the existing gap in the field regarding the pedagogical foundations of how students connect theory to practice during international internships. Third, the framework serves as a practical guideline for teaching and administrative staff who wish to develop international internship programs at home universities, supporting their ability to connect the practical aspects established in the literature with the additional organizational requirements arising from working with hosting organizations overseas.

### KEYWORDS

International business; internships abroad; problem-based learning; higher education; internationalization

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## 1. Introduction

The academic attention to international internships in business education dates back as far as 1994 (Baker and Woolverton 1994). In the last few years, the topic has gained increasing interest, especially among international business education scholars. Researchers have identified some factors regarding why international internships attract the attention of program managers in undergraduate and graduate business programs, including a paradigm shift in management education toward learner-centered education and the enrichment of educational programs by practical knowledge gained through students' interaction with actors external to the university (Charterina, Pando-Garcia, and Perriñez-Cañadillas 2019). Internships enhance employment potential (Gill et al. 2016; Silva et al. 2016): they provide students with intercultural communication, teamwork skills, and increased experience, thereby enhancing the attractiveness of their CVs after graduation (Johnson and Jordan 2019).

Within the international business literature, the topic of international internships has been studied from three different perspectives. One area of attention concerns students' competences when participating in internship programs. Research in this area addresses employers' preferences for candidates with international experience gained during their studies (Albers-Miller, Sigerstad, and Straughan 1999; Charterina, Pando-Garcia, and Perriñez-Cañadillas 2019); international internships' support of the skills necessary for students to facilitate their transition into the business working life (Reday and Counts 2013); personal traits development as result of international internship experience (Ding et al. 2019); and how business schools can cultivate global mind-sets through co-curricular activities (Le, Ling, and Yau 2018).

A second area of attention in the literature is the role of support structures in the development of international internships. Thus, research has tackled how students are supported when they work abroad as part of their internship (Currie, Matulich, and Gilbert 2004; Zurita et al. 2016), how having a variety of support structures is critical to enhance the students' experience (Currie, Matulich, and Gilbert 2004; Zurita et al. 2016), and how smaller business schools can offer international experiential learning to their students within budget restrictions (Johnson and Jordan 2019).

The third area of research concerns the pedagogical elements of the internship in international business. Early research focused on the development of frameworks to promote the internationalization of the business curriculum with a focus on problem-solving skills (Ortiz 2004). Later, the assessment of international business internships became an issue of interest (Rogers et al. 2009), in addition to the duration and organizational aspects of internships that suit experience-based study programs (e.g., MBAs) (Vance

et al. 2011). Other research is concerned with the effectiveness of internships in enhancing the employability of graduates and thus reducing unemployment (Silva et al. 2016). A closer analysis of the key topics addressed in the publications on international business and internships recently highlighted core themes such as “curriculum” (Johnson and Jordan 2019; Le, Ling, and Yau 2018). This indicates that the current debate is deeply concerned with *how* to integrate the internships into existing business and management education.

Extant research within international business and internships abroad indicates a number of gaps, including students’ perceptions of the internship experience and also the participating companies’ expectations of student interns (Ding et al. 2019), the impact of the business practicums into the international business students career development over time (Johnson and Jordan 2019), and employers’ actual valuation of potential employees’ experience through internships (Silva et al. 2016). In the literature, however, there is an absence of teaching frameworks that can indicate how to organize international internships through a student-centered perspective while also considering resources and the perspectives of both students and hosting organizations (Ding et al. 2019). This lack of a detailed design of the internship experience and its pedagogical elements is an established criticism of internships as a learning approach (Perusso and Baaken 2020). Connecting problem-based learning (PBL) as a potential pedagogical device to international internship design could address this gap while simultaneously tackling a less-studied area – the relationship between the three building blocks of managerial education as a comprehensive learning experience (ill-defined problems, real-world character, and reflection). These aspects relate not only to active learning approaches, including PBL, but also to case studies and internships (Perusso and Baaken 2020).

International business management, for example, relies on PBL as an alternative that promotes active learning and a student-centered approach. Students are introduced to an ill-structured problem that they must solve in groups, relying on their existing knowledge. As the teams work independently, they engage in self-directed learning. During the final phase of group work, the students present their solutions to each other (Zisk, Owyar-Hosseini, and DuBose 2015). Given the obvious complexities and intricacies associated with managerial selection decisions in multinational corporations (MNCs), the question of how to best prepare students to navigate such decision-making scenarios can be as challenging as it is important; thus, PBL represents an appropriate educational approach (Perusso and Baaken 2020).

Taking this empirical context as the point of departure, and responding to the gaps in the literature highlighted above, this paper tackles two interrelated questions:

- How can problem-based international internships best be designed to enhance students' competences within business education?
- What adjustments does the combination of these two active learning experiences in business education demand for small business schools, partner universities, and hosting organizations?

The paper's overall objective is to propose a framework based on a planned and controlled experience inspired by pedagogical action research to connect PBL international internships with international business. To tackle these questions, this paper describes an action research experience comprising the development of undergraduate and graduate international internships in business education as a collaboration between one Norwegian and two Brazilian universities. This paper's main contribution to international business teaching is a validated teaching framework that addresses the existing gap in the field regarding the pedagogical foundations of how students connect theory to practice during international internships. The paper also has practical implications for teaching and administrative staff who wish to develop international internship programs at home universities, supporting their ability to connect the practical aspects established in the literature with the additional organizational requirements arising from working with hosting organizations overseas.

## **2. Analytical framework**

Internships provide an active learning approach that expose students to real-life situations, allowing theoretical learning to be applied in context (Ding et al. 2019). As result, internships are framed in reference to experiential learning (Kolb and Kolb 2005). Vance et al. (2011) refer to experiential learning theory as the basis of different types of study abroad programs, aligning internships to study abroad programs, cross-cultural virtual teams, and short-term programs. International internships also align with service-learning principles, a specific type of experiential learning approach, which can be managed by an external consultancy. Pedagogical principles rely on student autonomy, allowing students to gain project management experience and exposure to local realities abroad (Johnson and Jordan 2019). Another learning theory that inspires international internships is Vygotsky's zone of proximal development (ZPD), which suggests the degree of assistance for the student alongside their development phases. Early in their career, students require close follow-up and supervision, but the longer they stay in the program, the less this is required. Based on these constructivist learning theories, there is a close integration between curricular development and, e.g., project-based learning (Jones, Yazdani, and Barton 2019).

International internships are included in study programs to achieve different objectives. In terms of professional development, research links international internships to practical experience and international exposure (Albers-Miller, Sigerstad, and Straughan 1999), enhancing entry-level credentials for graduates (Reday and Counts 2013), and offering a good approach to achieve specialized training in foreign business languages (Albers-Miller, Sigerstad, and Straughan 1999). A focus on service learning international internships seeks to support students' development of their own values. Such internships also serve to enhance the cultural context, knowledge of stakeholder groups, and provision of management skills such as communication and leadership (Young and Karme 2015). Mello (2006) highlights learning objectives for international internships for business students, including gaining a better understanding of the export sales programs launched by the hosting organizations.

### ***2.1. Supervision and support structures in international internships in business and management education***

An important component of an internship as a learning device is its supervision structure, derived by the hosting organization, the partner university, and the students' home university, creating a three-party collaboration with the student at the center of the learning process (Mello 2006; Vance et al. 2011). Internships are also a particularly resource-intensive learning form, requiring backup from the organizing business school; besides offering supervision, the school must help the student find a placement, offer networking activities for information sharing, provide recognition in the form of study credits, and fund or promote the activities (Gill et al. 2016). All these elements add to the complexity of internship organization at undergraduate and graduate levels.

Business schools' organization of international internships has varied in terms of credit allocation and the timeframes set for students to live abroad. At the undergraduate level, internships are usually organized later during students' studies, when they have developed a solid theoretical base that can help them navigate practical tasks during the internship. These internships typically last five months, are aimed at four-year bachelor's students, and offer 30 ECTS (European Credit Transfer System) (Ding et al. 2019).

Other programs offer internships to undergraduate and graduate students equally through a marketplace, as internships are announced by university partners in the private sector. The selection of a student requires interviews, self-selection, or recommendation by the faculty, all following an initial review of approved internship opportunities. The student applies directly to the hosting organization. Internships can also complement a typical semester progression by taking the form of six- to eight-week summer programs or

an overseas stay lasting at least 13 weeks to provide higher-impact experiences (Johnson and Jordan 2019). Some of these host organizations develop pre-defined projects, and the university issues three to six credits for the internship (one credit equals 50 hours) (Johnson and Jordan 2019).

Business schools then facilitate pre-departure preparation activities. These include cultural immersion in the internship country, which can be combined with broader language training. At this pre-departure stage, it can also be relevant to help students understand business etiquette and culture compared to the home country's etiquette (Johnson and Jordan 2019), attend virtual meetings with the hosting organization, and develop a theoretical understanding of the hosting organization's activity area (Mello 2006).

Previous research highlights the importance of support structures, including both preparation and the setting of realistic expectations, as part of international placements. Resources are also a critical issue within international internships, and the authors discuss the implications of administrative and coordination activities for the involved higher education institutions (HEIs). These activities support multiple students undertaking internships in multiple companies. The hosting organizations have also provided feedback on the shorter timeframe of internships, implying that they are more time intensive and less rewarding than long-lasting internships (Silva et al. 2016). Necessary support structures include administrative aspects throughout the orientation and application process as well as the coordination of travel. However, one cost-effective way to manage international internships is to hire a coordinator, who can be a junior professor or an in-house executive (Johnson and Jordan 2019).

## **2.2. *Toward a problem-based international internship framework***

PBL is a collaborative pedagogical approach that employs self-directed learning and focuses on problem-solving. It is influenced by constructionism in the sense that the students are co-creators of knowledge (Yew and Goh 2016). Given the significant development of PBL and its adoption in multiple countries across different programs, the conceptual boundaries of PBL have blurred. It is argued that PBL should be understood as a general education strategy rather than as a method (Savin-Baden and Major 2004). There are, however, certain relationships between PBL and other approaches (project-based learning, problem-solving learning, action-based learning). In PBL, knowledge is developed through open-ended situations and problems, while in other approaches, tutors maintain greater control and prescribe the direction of students' work. The role of the student also differs: In PBL, students are active participants and critical inquirers and are afforded significant responsibility to own their learning experiences (Savin-Baden and Major 2004). In a PBL

learning environment, the problem is viewed as a mechanism to spark students' interest in an issue by empowering them to converse in groups, identify relevant theories, and thus generate self-directed knowledge (Schmidt 2012).

The previous research also highlights certain characteristics of PBL in business contexts that vary subtly from the traditional understanding of PBL. The main difference is that business students move beyond the usual stages of "solving a problem" to actually implement the solution and monitor its implementation. This process differs from traditional PBL cases in which students design a solution but do not implement it. It is also unlike processes in traditional internships where students implement solutions without designing them. Hence, PBL in business contexts also encompasses a more comprehensive reflection of the design and implementation stages (Perusso and Baaken 2020). Christensen (2020) presents one example of PBL-integrated internships for pre-experienced students with companies in the university's region of the university. The entire semester was organized according to the project work at an organization, with five ECTS focusing on business analysis tools. PBL internships with organizations were counted as semester projects worth 25 ECTS.

The integration of PBL within a business practice follows a process analogous to that of a classroom-based PBL course, including student preparation, problem analysis, problem resolution, and assessment. The preparation phase concerns students' developed familiarization with theories, the context of the focal firm, and the initial framing of the problem. When recruiting participating firms, it is important to confirm that they understand the true nature of the problem, are properly aligned with the internship goals, and aim to support the students' learning process. As part of the project, the students define and refine a scoped problem area, which will usually be modified from the firm's original intent. Consequently, the problem area initially identified by the firm will be slightly adjusted during the project (Christensen 2020). During day-to-day operations, challenges arise in forms that differ significantly from the theoretical models that are covered in textbooks; hence, in the context of PBL internship management, ill-defined problems provide the necessary complementary training better than textbooks (Perusso and Baaken 2020). In individual or team-based internships, a supervisor is assigned; he or she has experience in the theoretical or practical domain of the student and can therefore answer questions as they arise. The supervisor is also present during the meeting with the hosting organization at the beginning of the project. Six meetings are held with the team or student throughout the semester (Christensen 2020).

The anchoring problem will by principle vary in its characteristics, but Gjerding (2014) offers a typology of possible problem types: i) Critical events: These are typical situations in the organization's lifecycle that can inspire specific organizational challenges (a fusion, a purchase, or a sale of



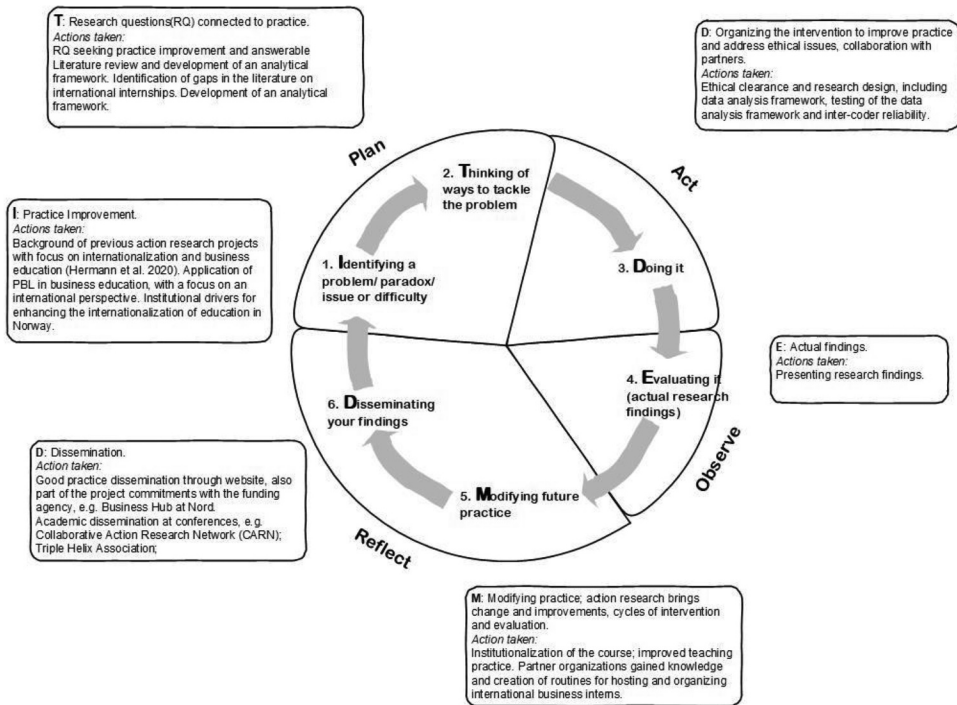
part of the organization). ii) Accumulated problems: These refer to burning organizational issues which were either not solved or were addressed through organizational decisions to prevent more significant issues from emerging. iii) Opportunity: This refers to a change at the organizational level that poses an opportunity, e.g., the launch of a new product or service (Gjerding 2014).

The solution process entails a series of meetings between the students and the firm in which students apply the knowledge gathered through their lectures and theoretical frameworks. Students should be creative and consider multiple avenues when defining the problem in the early stages. Steps that can help in this process include an analysis of barriers and opportunities and a cost-benefit analysis of potential solutions (Christensen 2020).

In the context of PBL, it is key to consider how to assess the students' problem-solving skills. Assessment methods should focus on how knowledge is applied when solving problems, evaluating how students understand key concepts and their interrelations. Thus, assessment can tackle how the students can grasp future learning considering their current knowledge base (Gijbels et al. 2005). The formative process is characterized by reflection and self-assessment; each student writes reports and considers their performance in the context of a collaborative project with their group peers. Regular meetings between the tutor and the group also offer students feedback on their performance (Spliid and Qvist 2013).

### 3. Materials and methods

Previous research on international internships in business has relied on qualitative research, including action research (Conroy and McCarthy 2019), case studies at programs within business schools (Gill et al. 2016; Johnson and Jordan 2019), and ethnographic methods (Young and Karme 2015). We adapted the Identify, Think, Do, Evaluate, Modify, Disseminate (ITDEM'D) pedagogical action research methodology (Norton 2019) because of the flexibility of its methods in educational settings and the nature of our research question, which is closely connected with practice and curricular development. One important element of this methodology is the commitment to teaching practice improvement, which aligns with the overall scientific paradigm supported by action research scholars (Helskog 2014). ITDME'D, as a form of action research, also brings added value for educational settings (Dosemagen and Schwalbach 2019). It allows teachers to develop craft knowledge addressing issues in the classroom through systematic inquiry and reflection; it empowers teachers to become reflective practitioners (Schön 1983); it aligns teachers toward continuous improvement, thus going beyond the administrative and lecturing tasks an enabling the systematic collection and analysis of



**Figure 1.** Methodological framework adapting the ITDEM'D pedagogical action research framework. The circle represents the “conventional” action research phases, while the outer boxes refer to the implementation in this action research project.

data; and it transforms students, as the transformation of teacher practices for the good can ultimately improve the student learning process (Dosemagen and Schwabach 2019).

The adaptation of ITDEM'D for this study comprises the six steps summarized in Figure 1. These steps constitute an expanded version of educational action research qualitative principles, namely plan, act, observe, and reflect (Norton 2019). It starts with the identification of an issue or problem that requires attention on teachers’ day-to-day activities. Once this issue is identified, the teacher “plans” a methodology that is in itself a project to be implemented in the classroom or university setting. The “action” is the implementation of the project, represented by anything from small interventions in the classroom setting to entire course development. “Observe” is aligned with the action and means systematically and ethically collecting the qualitative materials that help make sense of the intervention and which ultimately aim to improve the practice. “Reflect” is thus the sense-making of the results of the action (Dosemagen and Schwabach 2019).

### **3.1. Course design and execution**

This paper is part of the project “Management practice in the context of global value chains” funded through the InternAbroad program by the Norwegian Ministry of Education and Research (DIKU 2021). InternAbroad seeks to increase the number of students completing internships in international organizations as part of their higher education studies. The HEI partners in this project received InternAbroad support to enhance their collaboration in business education integrating PBL, which began in 2018 through a summer school, the purpose of which was to identify areas of international business priorities within sustainability and entrepreneurship. These partners included Nord University Business School (HHN/NORD Norway), Fluminense Federal University (UFF-Brazil), and Federal Institute of Rio Grande do Sul (IFRS-Brazil) (Hermann, Bossle, and Amaral 2020).

HHN/NORD is thus responsible for the curricular development in this project, through which students at this institution will benefit from credit-issuing international internships. At HHN, the international internship was organized within two summer courses, elective for second-year bachelor’s students (10 credits) and first-year master’s students (7.5 credits), with each credit accounting for 30 workload hours. The course learning objectives were subsequently designed in close collaboration with the bachelor’s and master’s programs’ coordinators at HHN. Faculty members at Nord University and their staff in charge of compulsory professional practice (particularly with the nurse and teacher education programs) were also closely consulted. Appendix 1 summarizes the main elements of the courses at the bachelor’s and master’s levels, following the analytical framework presented in this paper.

The internship took place between June and August 2019, when six students traveled to Brazil for their internships in organizations located in Rio de Janeiro, Niteroi, and Bento Gonçalves. Each student organization received supervision from the home university as well as from the local partner HEI and the hosting organization.

### **3.2. Data collection**

The primary information was gathered through thirteen semi-structured interviews (Table 1). This purposive sampling strategy aimed to identify those individuals who could provide rich information and insights on the issue under study and thus help answer the research questions (Bryman 2012). In this case, we employed criterion sampling (Bryman 2012), which considers the sample of student interns and their coach at the host organization abroad. The logic of including a sample of both students and host organizations’ staff was to obtain the best quality insights to “evaluate” the intervention (following the ITDEM’D cycle).

**Table 1.** List of interviews and codes used in the empirical section.

Interview code	Reason for the interview	Duration (minutes)	Transcript length (words)
<b>1_Co</b>	Host organization	62	10,271
<b>2_Co</b>	Host organization	33	4,700
<b>3_Co</b>	Host organization	44	6,073
<b>4_Co</b>	Host organization	32	4,300
<b>5_Uni</b>	Partner HEI	67	8,064
<b>6_Uni</b>	Partner HEI	50	6,275
<b>7_Uni</b>	Partner HEI	30	3,500
<b>8_Stu</b>	Student	43	3,988
<b>9_Stu</b>	Student	43	4,754
<b>10_Stu</b>	Student	49	6,325
<b>11_Stu</b>	Student	35	3,779
<b>12_Stu</b>	Student	52	7,272
<b>13_Stu</b>	Student	35	4,094
<b>TOTAL</b>		<b>525</b>	<b>73,395</b>

Clearance for data collection, processing, and safeguarding was given through the Norwegian Center for Research Data (NSD), notification form 437,206. Participants signed a consent form that allowed the interviews to be recorded and transcribed verbatim in English (six interviews with the students) and Portuguese (seven interviews with the hosting organizations and partner HEI). The authors had proficiency in both languages and analyzed the interviews without translation to avoid loss of meaning. In total, 525 minutes of audio transcripts and 74,000 words of text transcripts were collected. According to qualitative research methods good practice, a key aspect of internal validity when working with a small sample is to reach theoretical saturation, defined as when no new or relevant data appear from the categories and when the categories are well established in their dimensions. Briefly, this is when new data no longer provide new insights or emerging dimensions (Bryman 2012). We thus considered that our sample was sufficient to reach theoretical saturation and help answer the research questions.

A semi-structured interview guide was developed for each interviewee group based on the literature review (Appendices 2 and 3). The interviews were transcribed by research assistants proficient in either English or Portuguese. The transcript was first read by the researchers, and each interviewee then checked the interview transcript to approve the information or to identify potential mistakes. Information about the interviewee was anonymized, and the data connected to the interviews were only accessible to the authors of the study.

### **3.3. Data analysis and synthesis**

We applied the thematic analysis technique to analyze the empirical materials. This technique's basic function was to examine the interview data for latent themes or patterns of meaning across the whole collection of documents (Braun and Clarke 2006). In their highly cited manual, the authors distinguish a deductive thematic analysis, in which a theoretical framework guides the

analysis of empirical materials. Such a theoretical lens thus serves to identify how the theory echoes into the data, and it is primarily driven by the research question (Braun and Clarke 2006). A deductive approach thus requires the development of a codebook, defined as a list of codes that the researcher uses to synthesize the ideas presented in the empirical materials (Saldaña 2009).

We adapted Braun and Clarke's (2006) six-step technique with a deductive framing. As the first step, we skimmed the interview transcripts to familiarize ourselves with the data. As the second step, we prepared an initial list of codes to illustrate these essential elements about international internships in business and problem-based learning, following the literature review. We define a code in line with Saldaña (2009, 8):

I advocate that qualitative codes are essence-capturing and essential elements of the research story that, when clustered together according to similarity and regularity—a pattern—they actively facilitate the development of categories and thus analysis of their connections.

We then read each interview transcript to identify sentences or paragraphs that related to the codes summarized in the codebook. During this process, we used the qualitative data analysis software QSR Nvivo, which allowed us to not only store the file source (transcriptions) but also generate a tag dictionary based on the codebook. In this process, we also included potential new codes that were likely to emerge from the data.

To avoid different interpretations and improve the quality of the process, the authors had two sessions of one hour each to discuss coding application and homogenize the interpretation of the interviews. Some codes had to be reviewed (in terms of interpretation), and new codes emerged from this process.

As the third step, we started to identify the latent themes in our data, wherein the goal was to make sense of first the categorical organization and then the thematic organization of the initial codes.

Here, we differentiated between “categories” and “themes” following the definitions in Saldaña (2009). Once we had a final list of codes, we grouped them according to “categories,” defined as patterns that help group codes that share a similar meaning into families. In qualitative research, this implies a classification reasoning for codes that look alike (Saldaña 2009, 9). Themes, on the other hand, represent a more abstract – close to conceptualization – grouping of categories; as Saldaña (2009, 13) put it: “A theme is an outcome of coding, categorization, and analytic reflection, not something that is, in itself, coded.” We ended this phase with a list of potential – though not definitive – categories and themes.

As the fourth step, we continued reviewing the categories and eliminated possible redundancies. For example, we realized that some categories could be merged or that other categories could be placed in both themes. Appendix 4 presents the lists of the codes with their description, categorization, and themes as defined at this step.

In the fifth step, we generated a final overview of the themes and categories in order to make sense of the story. The first key theme was “problem-based learning,” and it was based on three categories: “PBL pedagogy,” “implementation,” and “assessment.” The second key theme was “international internships (in business education)” and included organizational aspects such as “credits and timeframe,” “preparation phase,” “support structures,” and “cultural immersion.” Table 2 summarizes the frequencies of the codes in the data analysis. Based on this table, the code with the most frequent appearance in the interview data was “coaching and supervision” (35) followed by “coordination” (29). Both codes are within the two categories whose codes are the most frequently highlighted in the interview data (PBL pedagogy and support structures, respectively). The emergence of these two codes indicates the importance given by students and companies’ reflections to both tutors and the administrative routines behind the practicum.

The sixth step involved writing the results. Following the methodology for writing qualitative research, as stated by Miles, Huberman, and Saldaña (2014), the results reflect the thematic analysis as summarized in both Table 2 and Appendix 4. This means that the next two sections are linked to each of the themes, and each section reflects the structure of categories identified during the data analysis stage. We acknowledge the differences expressed by the student and hosting organization interviewees as part of the interviews. These are reflected as part of different viewpoints on a focal issue, thereby contributing to the theoretical saturation of the categories of data (Patton 2002).

## **4. PBL international internships in business education: results**

This section addresses the first research question and thus focuses on the first theme, “PBL implementation of international internships,” highlighting pedagogical considerations, the implementation of interns’ recommendations, and the elements of assessment.

### **4.1. PBL pedagogical elements**

#### **4.1.1. Coaching and supervision**

The first issue that interviewees mentioned was the frequency of the supervision throughout the internship period. Students experienced supervision first and foremost from the hosting organization each week. The meeting

**Table 2.** Data analysis frequencies for codes, categories, and main themes identified through the interviews.

Themes, categories, and codes	Sum of Frequency
<b>Theme 1: Problem based learning</b>	<b>112</b>
<b>Category: PBL pedagogy</b>	<b>91</b>
Coaching_supervision	35
Collaboration	23
Not predefined-solutions	1
Open-ended situations and problems	12
Self-directed learning	14
Unstructured problems	6
<b>Category: Implementation</b>	<b>4</b>
Implementing recommendations of the intern	4
<b>Category: Assessment</b>	<b>17</b>
Focus on how knowledge is used to solve the problem	8
Formative assessment	4
Multiple methods	5
<b>Theme 2: International internships</b>	<b>147</b>
<b>Category: Credits timeframe</b>	<b>18</b>
Academic recognition	4
Fit into the curriculum	4
Methodological variety in report	4
Theory use	6
<b>Category: Preparation phase</b>	<b>57</b>
Initial problem	19
Kickoff meeting	7
Meeting students and firm	21
Recruiting firms	10
<b>Category: Support structures</b>	<b>72</b>
Administration	19
Coordination	29
Cultural immersion (sub-category)	24
<b>Grand Total</b>	<b>259</b>

with the company director allowed students to present work in progress and receive feedback (13\_Stu). Students valued the conversations with the host organization contact partly because they offered insights into the operation of small companies and the market in Brazil. Understanding relevant cultural factors and deciphering the cultural code and etiquette were highly valued during these interactions with the organization's contact (10\_Stu). Certain aspects of the coaching and supervision process also facilitated some degree of alignment between the day-to-day activities of the intern and the host. Thus, identifying a meaningful internship scope and agenda was a way to address the student's expectations regarding, for example, the type of project or how closely it aligned with "normal activities" (12\_Stu).

The second characteristic of the internship supervision involved the distribution of roles in the project among the supervisors at the company and the local partner university. The host organization positively valued the communication with the academic supervisor at the local partner university and the home university:

We get updates about what was expected from the students, and we exchanged feedback with the universities. Teachers constantly kept me asking if progression was good. (4\_Co)

The hosting organization coordinated two weekly meetings with the students; after the meeting, the students were free to organize their work to accomplish the assigned tasks. Coaching and supervision also signaled care for the student's well-being and safety:

We advised them broadly, information, about safety. I always advised them, about take care in certain city areas. As they are young, isn't? hopefully everything went well safety wise, without any hazard. (2\_Co).

#### **4.1.2. Collaboration**

The interview data highlighted three types of "collaboration" dynamics. Here, we perceived that some hosting organizations understood "collaboration" in the broad sense, i.e., an international internship helping to understand the significance of problem-oriented collaboration with external parties (6\_Co). Trust building and resources available for the intern activities were also considered key to the internship. It is noteworthy that this differed from company to company, as some students also had the opportunity to meet with stakeholders.

I think two months is a short time. Because they were very welcoming the first week but I think it took some time for the company to know me and trust me and for me to participate with them. I think if I had been there for three months, I would have been asking more about 'let me meet the customers,' 'let me see how it is all working.' (13\_Stu)



Collaboration among students was also highlighted by the interviews. Students collaborated by exchanging general information about the nature of their internship, including the focus of their assignments and their overall contribution to the host organization:

We lived together, and we talked together all the time, but I really didn't know what we both were doing day-to-day at the hosting company. We discussed anyway about the final report focus. We had, you can say, the complete opposite task at hand: both in terms of the nature and in terms of how wide the assignment was. (10\_Stu)

A third issue emerging from interviews was hindrances to collaboration during the internship. An intern's collaboration on a host organization's project is subject to the external context affecting the organization. Issues such as the organization's business environment and financing in the case of public organizations can affect the supervision and funding needed to collect data:

I had initially considered collecting primary data for my report in the form of interviews. That was primarily because I didn't have access to the primary sources that I had initially thought was going to be available to me. (9\_Stu)

One hosting organization claimed that time was a major collaboration constraint for smaller companies receiving an intern. Problem-based internships require the student to write a report, and a major challenge is the lack of access to empirical materials. These materials are usually not systematized in smaller companies, and the supervisor is responsible for helping the intern to obtain this information:

As a start-up, we don't have all that information systematized in stakeholder reports as large corporations. As result, part of the time we support the student collecting the information. The time and resources for this follow-up and support are necessary to consider in the scheme of collaboration with the home university. (1\_Co)

#### ***4.1.3. Open-ended situations and unstructured problems***

One of the benefits of PBL as a learning method is the opportunity for students to work with real, unstructured problems. In practice, the interns must themselves assess the nature of the problem(s) the hosting organization faces by integrating theories previously learned during classes and collaborating closely with the host organization:

When the student came, we sit together and map the business areas of the company. In collaboration with the student, we made a figure and pointed out all areas where he could contribute. (1\_Co)

Students valued the opportunity to immerse themselves in the real issues facing the business operation as well as the close interaction with the organization manager. As a result, the focus of the internship was able to evolve over time:

I was interested about the pricing of the organization activities in terms of costs. We had this huge Excel spreadsheet, where they calculate their costs and their processes. (8\_stu)

Becoming familiar with the hosting organization and its products was key to framing the initial problem. One student identified this as especially important during the first three weeks of the internship:

For me it was very important using my first two or three weeks to really understand what the hosting company was doing. Because for me, I couldn't . . . write a report about how they could do better if did not understand their products and services. (13\_Stu)

The nature of the firm, which was a start-up, also complemented the open-ended nature of the internship, providing additional motivation for the student, particularly the possibility of learning multiple skills related to managing a small organization:

So, it was pretty hard to understand how his days were, because every day was different. It was like the typical characteristics of a start-up, where it's very organic and very hard to explain shortly what the actual tasks are in the company, so this was the biggest difference that I noticed. (10\_Stu)

For the students, open-ended situations and problems created a particular set of challenges, especially in terms of how to develop a research problem into a fully-fledged report by integrating empirical evidence with theoretical perspectives from international business:

Generally in the wine industry and then specifically how other wineries throughout the world, from Spain, Italy, had entered and being successful at the Chinese market. Getting this background scholarly information I wouldn't say it was the easy part, but it was kind of the less challenging part because it was pretty straightforward. Once I had that information, I ran into challenges where I didn't really know where to go from there and how to structure the report itself. In particular, how to balance published information with the information I collected on site. (9\_Stu)

Students who were less experienced with independent work mentioned challenges related to the particularly "open-ended" nature of the internship. One challenge mentioned was uncertainty regarding how the preparation phases could be later used in the report, leading to concerns about time management (12\_Stu). The "open" character of the problem at hand was evident since the start for the interns. They valued how this allowed them to freely connect with the theoretical perspectives. Meeting with the organization's external stakeholders was also important to facilitate this initial problem framing:

The company showed me their concerns, their constraints. That allowed me to address some issues that they had. We had a lot of client meeting, so for me it was to prepare things on my own and meet them three or four times a week. (11\_Stu)

#### **4.1.4. Self-directed learning**

Students positively valued some aspects of self-directed learning. For instance, they valued the fact that at the master's level, the internship allowed them to learn independently. Self-directed learning also implied a certain autonomy for students to decide on the scope and contents of the report, and students indicated that they learned much more as a result (8\_Stu). Another student explained that self-learning in the context of the internship implied reviewing the extant literature on the topic as well as discussing the internship project with the company supervisor to align expectations. As a result, the student prepared a short interview guide to meet customers and collect empirical data (10\_Stu):

Let's say, a visit once a week with a customer company in Brazil, and talk to somebody that was in charge of getting financing or, because I've contacted Innovation Norway and we had the introduction meeting and I met again to request additional information. My host also gave me some documents from both their company and other related research. I assume this documentation was what they found relevant. But in terms of literature review, I had to go back here. I didn't have access to scope for instance, so things were done quite a lot here in Norway. (10\_Stu)

Students also valued the intellectual curiosity sparked by the internships' tasks:

So, for example, entrepreneurship in Brazil is a lot higher for women than it is in Norway. I was trying to figure out why is this, as result, that was actually quite a big topic in my report. Maternity leave in Norway is paid for more months than in Brazil, and that has consequences on mothers' willingness to start a new enterprise. (12\_Stu)

#### **4.2. Implementing interns' recommendations**

The end of the internship often involves different approaches to integrating the interns' recommendations into the host organization's practice. One organization implemented the intern's suggestions concerning business model updates through the business model canvas tool. However, other students felt that members of their hosting organization did not intend to implement changes in the first place due to previously existing knowledge about the research topic (11\_Stu).

In another organization, the student worked with two tasks in parallel during his internship: for several weeks he developed a business plan for a new product. Later, the student spent a few weeks researching funding opportunities for social impact business. The student's report, which gave him credits, focused on the new product. Reflecting on the intern's project and report, the company resisted framing the intern's experience as an area of impact for the organization in which the internship "product" subsequently had an application:

We took a time considering what the interns' project could be about. We thought about a new product that could be commercialized here in Brazil. However, this product was not our priority at the time. As result, the best choice was to focus the internship on fundraising for business of social impact. (1\_Co).

### **4.3. Assessment**

The internship was assessed through a written report delivered to the home university. To prepare the report, students had to analyze a problem issue within the international business context, use management theories to develop potential solutions, and design a solution for the hosting organizations. However, the interviewees' feedback about assessment goes beyond this final report, focusing mainly on a formative assessment throughout the internship. Interviewees identified the three main elements involved in the assessment of the internships, namely the use of knowledge to solve the problem, the use of multiple methods during the project development, and the application of formative assessment during the internship period.

Each hosting organization reflected on the implications of the intern's previous knowledge and studies in the internship's project scope and the potential contribution of the student therein. This preliminary assessment entailed a holistic perspective of the intern's language competences, the courses they had taken during their master's degree, their personal interests, and the potential alignment with the organization's projects:

Certainly, for us, it was important to consider the intern's profile; not having the local language knowledge or he was not familiar with our culture, possible not likely an expert in the technology we sell. However, the intern had some competences we could potentiate. (1\_Co)

The integration of multiple research methodologies was also a crucial part of the PBL internship, and these multiple methods are reflected in the assessment. One student reflected on this inclusion of multiple research methods during the internship period, especially during observation. This method offered an ethnographic perspective geared toward organizational activities and performance. As a result, some reflection over time could be documented in the report (2\_Co).

Ideally, producing a comprehensive (problem-based) internship report required a close follow-up and continuous feedback from the tutor, not only from the organization but also from the partner university. Such feedback ensured that students did not procrastinate on the report, enabling the writing process to go forward step by step according to a plan:

At least the teacher is there to supervise the student, right? However, it shall be a progressive supervision, not leaving all feedback until the very last minute, so things are not prepared then. That continuous pedagogical support is key, providing a plan, if possible per week, and assigning specific weekly targets. (1\_Co)

## **5. Requirements for business schools and international partners: project insights**

This section addresses the second research question and presents the second theme of the data analysis using the categories of credits and timeframe, preparation phase and support structures.

### **5.1. Credits and timeframe**

Reflecting on the credits and timeframe elements of the internship, the interviewees valued academic recognition and the connection between practice and theory. Students highlighted the opportunity to acquire real-world experience aligned with their academic experience (9\_Stu). Language skills and, again, practical experience along with studies abroad can be viewed as characteristics that differentiate students when they graduate (10\_Stu), offering them enhanced opportunities for jobs and further studies. As a result, students highly valued the chance to obtain academic credits connected with an international internship.

### **5.2. Preparation phase**

The interviews reflect the hosts' efforts to identify and offer an adequate problem area to the interns. One interviewee highlighted the challenge of developing problems in business and management for a technical start-up:

“The business model canvas, strategic management, was then brainstormed as a potential area of interest for us.” (3\_Co)

Both the framing of the initial problem and the formalities regarding the student exchange and the host were agreed upon by the partners. The main instrument used to manage the activities was the contract signed by the student, the home university, and the host. The interviewees recalled that students signed an internship agreement, which explicated the internship's potential problem area:

We had to make some adjustments in the contract given that the intern lacked a theoretical background on innovation theories. (4\_Co)

Interviewees reflected on the initial meetings with each individual host. In these meetings, the intern and the host discussed the organizational structure and the business areas and brainstormed targets for the internship (3\_Co).

### **5.3. Support structures**

The alignment of expectations before the start of the internship was assessed positively by the HEI and hosting organizations, as one firm mentioned:

I think the main thing is the alignment of expectations, which we had between us, the university, with the student. It's interesting that, if there is any expectation on the part of the student, or on all sides, it's important that this is put at the beginning. (1\_Co)

Brazilian academic institutions offer minimal accommodation support for students, as this is not part of their current structure. Therefore, guest students must rent external bedrooms or apartments. Host institutions supported students in finding quality accommodation in suitable areas (11\_Stu). One student mentioned that the host organizations provided logistical support upon arrival and helped them transition to city life (9\_Stu). The budget was also generally satisfactory for the students and host institutions.

Preliminary meetings with host universities and students were crucial to align all the expectations of the students and companies, allowing their stay abroad to proceed more smoothly. Nevertheless, one challenge for the companies was the time constraint. Most of them were small, and thus allocating even one employee (minimum) to supervise the student was a demand on resources:

I think the biggest challenge was not having an executive secretary or a person within the company who would be taking care of this, to welcome these students to interact, to provide information, to speak the language, eventually accompanying these students on cultural visits. (1\_Co)

Students also faced some challenges regarding the companies' expectations of them, which were not always clear. In some situations, even if the student did not have a strong understanding of their role, they were able to clarify with their supervisors along the way. However, other students had to adjust their plans due to difficulties at the workplace or language issues, as they faced problems such as buying food in the cafeteria:

I would have liked more information about ... my first week there. What they were expecting, dress codes, just general information. I had to ask them on a Sunday evening ... 'I haven't heard anything, when am I supposed to be at the office tomorrow?' (5\_Uni)

#### **5.4. Cultural immersion**

The cultural aspect of this entire project for the students, the universities, and the host organizations needs to be strongly emphasized. The companies in Rio, which were small organizations that dealt directly with favelas, allowed the professors, supervisors, and students to experience a new reality that was very different from that of Norway.

What we tried to do is to provide the student with various experiences. So he had an experience communities, getting to know the reality of the favela or with the R&D department. (1\_Co)

Although the students faced a language barrier, it is worth mentioning that people were, in general, very disposed to offering help, even if they did not speak the language.

The whole team was also super excited and collaborating with him. Even people who didn't speak English tried to interact for him to try, finally, to get a new language, right. Get to understand at least the context of a new language. (4\_Co)

Even if the staff does not speak English well, they were very proactive in trying to help. (6\_Co)

Cultural experiences were rich in several aspects. Students had the chance to travel and live in a new country, a new city, a new culture. This also helped students to integrate in their teams, as highlighted by both the host and students themselves:

And they [interns] tried different foods, tapioca, açaí, those things that are more attractive in terms of Brazilian cuisine, feijoada. So, it was very interesting to see that they really tried to take advantage of this opportunity for that too. (3\_Co)

So there were external activities, of a social component that I did engage with my other colleagues. And also during lunches and break time, we would engage, have a dialogue, unrelated . . . some were related to work, but also just a kind of a cultural exchange. (9\_Stu)

Hosts and students reflected on the implications of the local working culture, in terms of both their work experience and the subject they were working on in the companies.

Interns come to Brazil with a different vision, so when they arrive specifically here in the south, they understand that it is another reality, and he had the opportunity and luck to participate in major events that happened, for example, Fenavinho. So it was really cool, the cultural experience he had was really cool. (4\_Co)

I think we could have learned something more about the Brazilian working culture. Because it's very much different in Norway. In the way that an employee that is not the boss can, in Norway, go to your boss and give and take feedback without, you know, getting the looks and the . . . that it's kind of looked at like disrespect. But my impression is that in Brazilian companies, you can't do that. (13\_Stu)

## 6. Discussion

In this section, we discuss our findings by organizing them based on both guiding research questions with a focus on the theoretical implications of the results. We then discuss the findings in light of the implications for practitioners by proposing a model, namely PBL integration in international internships.

### **6.1. Designing and implementing problem-based international internships in business education**

The first research question of the study is “How can problem-based international internships be designed to enhance students’ competences within business education?” Three main perspectives from the literature on international business introduce important elements into the results analysis in light of the posed research questions: students’ competences (RQ1), support structures (RQ2), and pedagogical elements (RQ1). The development of students’ competences in the international internship program brought a competitive advantage for those students in the job market (Albers-Miller, Sigerstad, and Straughan 1999; Charterina, Pando-Garcia, and Periañez-Cañadillas 2019), more flexibility in transitioning to business life (Reday and Counts 2013), the development of skills and personality (Ding et al. 2019), and the development of problem-solving skills through the pedagogical elements of the internship (Ortiz 2004), all of which are highly connected to PBL. Our findings expand previous research on PBL in business education and internships by acknowledging the special characteristics needed to implement PBL in an international component. We highlighted PBL elements such as coaching and supervision, collaboration, open-ended situations or unstructured problems, self-directed learning, implementation of recommendations from the intern, and assessment. The first element, supervision, is a well-known characteristic of PBL. With students as active participants and critical inquirers, the supervisor’s role is mainly advisory (Savin-Baden and Major 2004). Although a few researchers have examined this element, only Christensen (2020) described a case of internship supervision in which a supervisor assigned from the home university also participated in the initial meeting with the hosting company as well as six meetings with the intern team over the semester (Christensen 2020). Our findings expand this knowledge by highlighting the importance of supervision not only within the hosting organization but also by the home and partner universities. Supervision from the host company is a key part of the puzzle and provides additional elements that are not merely academic, including the possibility to unlock cultural aspects not easily accessed by an outsider. Supervision should be equally distributed between academic and non-academic partners (host organizations and universities); such distribution is appreciated by both students and hosting organizations.

In addition, our findings show that interns’ collaboration with each other complements supervision. While collaboration between students is more oriented toward practicalities, they also consider the relevance of theories vis-à-vis their internships. From the perspective of the intern-host organization, it is important to consider data access and the resources needed to help the intern collect this information. The collaboration aspect and the



constraints of the short internship can be overcome by improving the prior meetings between companies and students in terms of quantity and quality. Before going abroad, they should already have the chance to know each other and familiarize themselves with the staff, the context, and even the problems they will need to tackle. This might be a post-COVID legacy since most people have become more accustomed to this form of interaction, which prior to 2020 might have caused some awkwardness. Collaboration between interns in different organizations abroad is an understudied issue, which this model highlights as a way to complement supervision and coaching.

The second element in our model – the nature of the problem, as a “mechanism” to spark students’ interest in an issue, promote group discussion, and identify relevant theories (Schmidt 2012) through knowledge-gathering – is mainly staged through open-ended situations and problems (Savin-Baden and Major 2004). Our findings expand this knowledge into the context of international internships. The characteristics of an “open-ended” problem create benefits but also potential challenges. Our results show that benefits arise from the use of authentic, close-to-the-company realities in internships.

Our findings also highlight the challenges that emerge during the internship in determining how to use the theories and tensions between the preparation phase and the availability of data. According to Gjerding (2014), three types of initial problems are possible when setting up internships: critical events, accumulated problems, and “opportunities.” We can infer that tensions might emerge in PBL international internships that are specific to each of these problem types. All the interns interviewed worked with “opportunity” problem types, such as launching new products or services (Gjerding 2014). This appeared to be the case in most of the projects, possibly due to the students’ shorter timeframe in the organization and their limited ability to communicate in the local language. This finding suggests that students should be encouraged to focus on opportunity problem types during the preparation phases of their internships.

As the third element, PBL-based international business internships should strengthen self-directed learning elements by enabling students to develop their methodologies to collect empirical data, facilitating this data access, and supporting their intellectual curiosity during challenging situations at the hosting organization. Problem analysis can empower students to enter the organization with a more advanced contextualized knowledge of the issues at stake, hence improving the problem description and characterization. Over the course of the internship, students will redefine the original framing of the problem (Christensen 2020). It is deeply valuable to move from a learner-centered education toward a more practical learning process, e.g., by increasing students’ interaction with external actors in the real world (Charterina, Pando-Garcia, and Periañez-Cañadillas 2019). Internships

provide one more opportunity to enhance this in a different context and culture, boosting the learning experience, and envisioning new perspectives for dealing with different business situations. The nature of the host companies – usually small companies, with fewer people, and sometimes with one person performing different tasks and being responsible for the whole company – also has an impact on the learning process and the development of students' competences. They were supervised by a representative of the company, but not always followed closely, allowing them to develop skills in self-learning, self-responsibility and autonomy – important competences in the real world.

As the fourth element, PBL-based international business internships should aim for a degree of implementation of the students' designed solutions. An insight that emerged from the results is that the question of implementation should be addressed from the beginning of the internship period. We therefore integrate previous knowledge suggesting that in business practice, PBL should move beyond merely solving the problem theoretically and provide support to the hosting organization to follow up on its implementation (Christensen 2020). In this way, PBL differs from simple internships where students implement solutions but do not necessarily participate in their design (Perusso and Baaken 2020).

Assessments of this type of internship require close feedback and collaboration between the tutor at the home university and the hosting organization. The evaluation should integrate the host's advisory inputs, including an assessment of the "soft" elements of the intern, such as their adaptation to the organization's working culture and their demonstration of interest. These elements complement the application of the research methodologies learned during the business training. All of these considerations should be addressed through continuous feedback on the intern's work. This pedagogical element aligns with previous studies that highlight the role of the hosting organization by integrating a variety of assessment methods (weekly management memos, video conferences with the supervisor, logs) (Johnson and Jordan 2019).

## ***6.2. Organizing PBL international internships: administrative aspects and implications for stakeholders***

Here, we also provide a discussion of the second question of the study "What adjustments does the combination of these two active learning experiences in business education demand for small business schools, partner universities, and hosting organizations?" The second building block in the proposed teaching framework concerns the organizational aspects of the PBL-based international internship, namely credits and timeframe, the preparation phase, and support structures.

In terms of credits and timeframe, this course implemented summer internships with an eight-week duration, with 27 working hours each week. Our interview results reaffirm previous findings on the benefits of this timeframe to students, such as better job prospects and stronger language skills. The proposed integration of PBL in international internships thus aligns with reported international business practices incorporating a range of timeframes and credits allocations based on the country and experience, e.g., 10–20 hours per week during the fall semester or 20–40 hours per week during summer internships (Gill et al. 2016).

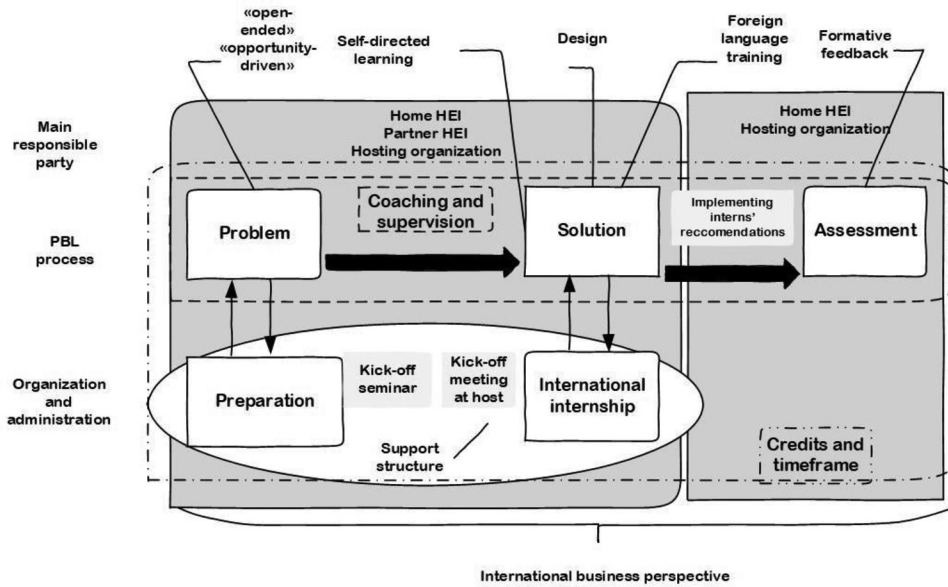
Our findings also indicate that preparation is necessary before the beginning of a PBL international internship, whereby the students, host organizations, and partner universities should be involved. This preparation includes identifying the problem area. Upon arrival, this preparation also involves an initial kickoff meeting between the interns and the hosting organization to address and clarify logistics. These findings show that the proposed model successfully integrated effective practices in the design of international business internships, including country-specific training but also language training (Mello 2006), host country business culture and etiquette (Johnson and Jordan 2019), or virtual meetings with the host organizations (Mello 2006). Previous research highlights some valuable practices related to support structures, including a reflection about the importance of financial resources; in particular, hosting organizations may face challenges and constraints in managing the participants' follow-up and supervision (Silva et al. 2016). From the perspective of the home (sending university) administration, addressing travel aspects for an international internship is time-consuming and in some cases requires the hiring of a dedicated staff (Johnson and Jordan 2019); alternatively, faculty members receive a stipend for organizing such programs (Mello 2006). From our findings, we infer that even if formalized agreements are in place with an HEI, at the operational level, internship organization depends on the individual commitment of professors and voluntary organization managers. The home university, as a result, should offer incentives, either as resources for hosting companies or in the form of staff and student exchanges. In the case of this study, funding was received through a grant, but in the long term, effective internship organization depends on the functionality of such incentives. Host organizations often assume several roles that should be the responsibility of the partner HEIs in the host country (e.g., helping the student adapt to life in the city or find accommodations).

Although the cultural dimension is defined as a category in support structures (RQ2), it permeates the analysis since supervisors and students could exchange ideas considering the cultural aspects in both countries, both for the businesses' solutions and students' reports as well as for advising students about social life (e.g., safety, general student well-being) during the internship period.

### **6.3. Implications for practitioners in international business education**

In addition to the two research questions addressed above, the study also aims to discuss the practical implications of PBL international internships not only for teachers in charge of international internship programs in business schools but also for the administrative staff supporting these programs. The teaching framework for international internships presented here is differentiated from business internships within the same country, given the experiential learning element of business cultures abroad. This emerges from the cultural immersion element of the support structures. Such an aspect was highlighted during the interviews, but it is also important to elaborate further. We thus provide the following practical guidelines to discern the use of PBL in an international business context to design effective international business internships. The relationships among the different elements in the guidelines are also illustrated in [Figure 2](#).

The model can be read as a prescription for good practice, starting from the left-hand side and moving to the right, representing the temporal process of an international business internship period abroad. In this way, it is possible to combine the pedagogical and administrative elements required for the organization of the internship. As the first step, from the administration side, “preparation” and “problem” should be aligned. This preparation includes identifying the problem area and, upon arrival, an initial kickoff meeting between the interns and the hosting organization to address and clarify logistics. It is important that the “problem” frames the experience of the international internship. Specifically, the hosting organization and the responsible teacher at the home university should agree on “opportunity problem types” relevant for international business. These fit well with interns’ shorter timeframe in the organization and limited ability to communicate in the local language. Examples include designing new business models and launching new products with a focus on the internationalization of markets. Once the internship has started, students are assigned to work on this particular project, which is connected to the previously agreed problem area. It is important that interns engage in “self-directed learning” while receiving adequate supervision. This implies that students should develop their own methodologies to collect empirical data, but the hosting organization should also facilitate data access to comply with the internship task. The context of working in a foreign-culture environment with issues bounded in the international market should inspire the student’s intellectual curiosity. Supervision should be equally distributed between the academic and non-academic partners, allowing the internship to be anchored in practice. This local tutoring should go beyond mere academic learning to include guidance in the student’s



**Figure 2.** Teaching framework for the integration of PBL in an international business internship.

understanding of the local business culture. During the internship period, the support structures are key, and based on the discussion points summarized above, the following insights should be considered. A good practice is for the home university to partner with an HEI in the receiving country where the academic staff is also involved in the international business internship at the operational level. In this way, the receiving HEI offers logistical support to the intern and facilitates the introduction to the local culture and business etiquette before the internship period. The home university should offer incentives, either as resources for hosting companies or in the form of staff and student exchanges.

At the end of the internship period, it is important that the interns' designed solutions to the studied problem receive the appropriate attention from the management. It is also important for the local tutor and the home university coordinator to address the implementation issues at the start of the internship. The end of the internship should also be in line with how the intern is evaluated at their home university. Of course, this depends on each institution's rules and credit system, but our experience shows that an eight-week period abroad including 27 working hours (internships) per week is a good rule of thumb to comply with a quarter of the total semester credits and the inclusion of this course as an elective in the program. The assessment should involve not only exams or written reports but also formative feedback, including an evaluation of the "soft" elements of the intern, such as their adaptation to the organization's working culture and on-site discussions each week.

#### **6.4. Reflections about organizing international business internships in the context of the COVID-19 pandemic**

This action-research educational project was inevitably impacted by the COVID-19 pandemic during 2020–2021. International exchange programs were particularly affected due to the measures taken to reduce physical contact and exposure to COVID-19 and the need to digitalize educational offerings (Crawford et al. 2020). A reflection on finding solutions to the increasing travel-abroad complications took place with similar programs in Norway, as well as with business partners. In some cases, the so-called “international mobility at home” was cited as a potential future area of work for HEIs as an alternative to traveling abroad – not just due to the COVID-19 pandemic, but also to motivate more students to have an international experience as part of their studies (Norwegian Government 2020). The viability of “internationalization at home” through remote or digital international internship was assessed in the context of business studies, but some drawbacks became evident. In this context, programs behind the organization of international internships in business might miss the experiential learning element of the internship, which is inherently linked to the cross-cultural exposure of travel abroad. In any case, as our findings show the learning value of problem-based international business internships, it is necessary to find solutions that can respond to suddenly changing international travel regulations as new COVID-19 variants emerge. One possibility is the implementation of blended-learning international internship programs. Blended learning incorporates remote activities often mediated through digital tools such as video conferences or digital collaboration platforms between students, tutors, or learning groups. It is often applied in fields such as entrepreneurship (Kickul, Janssen-Selvadurai, and Griffiths 2012), interdisciplinary social sciences (Coppens et al. 2020), and technology management (Hoic-Bozic, Mornar, and Boticki 2009). Such programs mix physical-presence modules like introduction seminars with remote interaction usually oriented toward a concrete project and with remote coaching and supervision. From the perspective of the partners abroad, hosting organizations and universities abroad could offer such blended internships.

### **7. Conclusion**

International internships are becoming popular as a learning method in business education, yet the international business teaching literature has already covered this topic for some years. While a thriving research agenda examines the impact of internships on students’ careers and employers’ recruitment as well as competences and personal traits, gaps remain regarding their pedagogical design and connection with student learning. This gap contributes to the skepticism in some academic circles about students’ learning in internships.

Through an action research project involving partner universities and hosting organizations in a Norwegian-Brazilian collaboration, we developed a teaching framework that better connects theory and practice, while also promoting student-centered learning based on real problems faced by the host organizations.

This paper contributes to international business teaching by filling the existing gap on how to account for students' learning during an internship while also managing the additional organizational and logistical aspects required by international internships in international business education for both undergraduates and graduate students. From this perspective, we add to previous research that has provided good overview of students' competences and skills after the internship period (such as problem-solving skills or global mind-sets) but has neglected to explain how this can be achieved in practice. The proposed teaching framework underlines the complementary nature of two active learning pedagogies in this context, namely PBL and student placement. The proposed model includes two converging axes in which PBL provides a learning flow for student-centered knowledge development. As a complement to the PBL learning flow, the model suggests organizational aspects that should be coordinated between the home university, partner university, and hosting organization (in the receiving country), namely credits and timeframe, pre-departure preparation, and support structures.

We suggest three types of further research on the implementation of active learning methodologies in PBL within international internships. First, in line with the emerging interest in mixed methodologies in this field (Charterina, Pando-Garcia, and Periañez-Cañadillas 2019; Ding et al. 2019), a follow-up study could evaluate the teaching framework with panel data across countries. In this way, PBL-based international internships could be assessed against a larger set of factors, including host country and type of organization, and controlled for post-COVID-19 international educational mobilities. The second category of follow-up research could focus on the organizational aspects of integrating PBL international internships, using our insights on the resources and administration of these programs. However, on the institutional level, increased global mind-set development is needed to change the way business schools operate. Studies of this type could, for instance, employ action research at the meso (organization) level. Finally, while our case emphasized the international dimension of internships, our theoretical framework and empirical analysis highlighted how students relate to the learning process. Cross-cultural learning aspects of international internships arose as an important element that permeates the internship experience; while it was a valuable element in our case, it was not the main issue under research. We thus suggest a follow-up study that frames cross-cultural learning as an alternative framing to problem-based learning in order to enrich the discussion within the international business community.

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