

Reconceptualizing pedagogy within the context of an Internationalized Problem-Based Learning Approach

Ourania Katsara*
University of Piraeus, Greece

*Corresponding author: okatsara@unipi.gr

Address: M. Karaoli & A. Dimitriou Str. 80, 18534, Piraeus

Abstract

In every university's endeavor to promote internationalization, pedagogy is vital and there is a need to research internationalization at different pedagogical levels within different learning approaches (Katsara & De Witte, 2020). This paper discusses the value of implementing culturally responsive pedagogy (CRP) within the teaching context of Problem-Based Learning (PBL). By means of a critical review, it is revealed that little is known on specific classroom internationalized pedagogies, for example PBL appears difficult to be implemented in a uniform way across the globe while becoming culturally responsive during teaching seems quite personal. Some future lines of research on students' support to PBL learning within teaching are offered providing the rationale for the development of possible departmental CRP training sessions for teachers. The evaluation of such training is suggested to determine the extent to which such an initiative could be part of a departmental pedagogy of internationalization policy development at the micro level.

Keywords: culturally responsive pedagogy, higher education, internationalization; problem-based learning

In a comprehensive literature review, Katsara and De Witte (2020) summarized relevant research within the context of internationalization in universities. Two main implications were drawn. Firstly, despite the fact that implementing internationalization is multidimensional depending on various contexts, policy development appears to be vital. It is important to devise a way so that policy making might be formed at different distinct levels with the mutual goal of providing quality education. Secondly, the pedagogical dimension is vital in every university's endeavor to promote internationalization. Key issues refer to students' engagement in maximizing the effects on their learning and implementing teachers' intercultural training and involvement in the internationalization process.

Katsara and De Witte (op.cit) argued that pedagogical dimensions are inter-linked with internationalization highlighting the tenets of culturally responsive pedagogy (CRP). They argued that even though there is evidence in the literature that there are ways of implementing CRP, national bodies of students might perceive teaching methods differently (Katsara, 2014). Referring on Signorini et al. (2009) who argue in favor of examining micro-cultures, for example one specific learning setting in HE in combination with individuals' relevant experience, Katsara and De Witte (op.cit) maintained that the relationship between internationalization and culture implies that there is a need to research internationalization at different pedagogical levels within different learning approaches.

Within the context analyzed in the review by Katsara and De Witte (op.cit), the case of one student-centered learning approach (PBL) will be analyzed in this paper. PBL is an interesting case to be examined because the opportunities provided by its international problem-based environment are difficult to implement uniformly across the globe, for example in Asian countries (Hallinger & Lu, 2011). This is further enforced by a systematic literature review conducted by Acton (2019) on evaluation methods assessing the effectiveness of problem-oriented and inquiry-based pedagogies implemented in universities. The review revealed that current research is often limited in scale and scope, demonstrating performativity rather than highlighting the aim to facilitate continuous improvement in teaching and learning. A significant number of studies demonstrated confusion between pedagogic strategies and educational research methods while studies lack evidence on participatory methods of evaluating students' experience and perceptions. Adding more on this, due to this limited research on students' involvement in evaluation for PBL, few studies articulate a commitment to pedagogic improvement and professional accountability to promote quality assurance processes in universities.

This chapter aims to summarize and reflect on earlier work to evaluate and reformulate correlations with regard to the relationship between internationalization, CRP and PBL practices. Some preliminary thoughts in relation to what extent CRP could be included in any discussion on institutional pedagogy of internationalization policy development in PBL practices are offered. The article unfolds as follows: First, a section describing the methodology used to search the literature is offered. Second, sections on how internationalization is conceptualized and an examination of the characteristics of culturally responsive teachers are given. Third, PBL's internationalized nature and its relationship to CRP is discussed. Finally, some key reflections drawn from the review and future research are noted.

Methodology

The search for the review used Educational Resource Information Centre-ERIC, web of science and the following search engines (Google, google scholar, altavista). It was decided to gather literature to build on Katsara & De Witte (2020) who highlighted the need to research the intersection between internationalization and intercultural pedagogy within diverse learning approaches. This implies that the topic of internationalization matures and its knowledge base seems to expand and as a consequence it would seem logical to assess literature and reconceptualize the topic. Therefore, the purpose of the current study was not to cover all articles published on the topic but to combine perspectives to create new theoretical frameworks or models reflecting thus an integrative review approach (Torraco, 2005). Within an integrative review approach, the critical review, one of the fourteen literature review types discussed by Grant and Booth (2009) appears to be the most appropriate. In their typology, Grant and Booth (ibid) argue that a critical review presents, analyses and synthesizes material from diverse sources assessing what is of value from earlier work while its final product typically manifests a hypothesis or a model for a new phase of conceptual development and subsequent testing rather than an answer. Critical reviews are either selective or representative and rarely involve a comprehensive search of all relevant literature or an assessment of the quality of the selected studies. Additionally, there is no formal requirement to explicitly present methods of the search, synthesis and analysis (Dixon-Woods et al., 2006; Grant & Booth, ibid).

Specifically, the element of criticality is helpful in the current study since it helps to deconstruct the topic into its basic characteristics, that is its history and origin, main concepts and key relationships through which concepts interact. This deconstruction helps the reviewer reconstruct conceptually the topic assessing how it is represented in the literature (Torraco, op.cit). In addition, the synthetical element helps to integrate new ideas to create a new formulation of the topic. As Torraco (op.cit) argues one of the four forms of synthesis refers to alternative models or conceptual frameworks which means new ways of thinking about the topic addressed in the integrative review. A targeted search was conducted using the terms internationalization, problem-based learning, and CRP to evaluate each item's conceptual contribution and their relationship. The search yielded many hits, and the first step was to determine which articles were relevant to the search. Following Torraco's (op.cit) and Grand and Booth's (op.cit) argumentation, the current review scanned abstracts to determine inclusion criteria. The review would be selective where chosen articles had to concentrate on higher education, excluding primary or secondary education focusing on articles analyzing how basic characteristics of each of the three terms are specified by academia.

Halpern (1998) identified certain components of critical thinking: understanding how cause is determined, recognizing and criticizing assumptions, analyzing means-goals relationships, giving reasons to support a conclusion, assessing degrees of likelihood and uncertainty, incorporating isolated data into a wider framework, and using analogies to solve problems. These components were used as a basis to select articles discussing for example how rationales for internationalization influence universities' choice of international strategies, how actualizing CRP impacts students' learning and performance, how challenging appears to implement PBL in different cultural settings etc. Secondly, articles were further narrowed by focusing on certain variables such as document type, dates, languages, etc. (Hammerstrom & Jorgensen,

2010, p. 27). The articles selected must have been written in English and published in peer-reviewed documents while priority was given to the most recent ones.

Literature Review

Internationalization

Conceptualization of Internationalization

Internationalization involves incorporating global, international, and intercultural dimensions into goals, objectives, content and delivery of higher education (Knight, 2015). However, universities are increasingly being seen as commercial ventures and internationalization is a source of funding and income for them (Altbach, 2015). Buckner and Stein (2019) analyzed the approaches of three leading higher education professional associations, that is the Association of International Educators (NAFSA), the international Association of Universities and the European Association of International Education where it was revealed that all three associations conceptualize internationalization in terms of coverage of regions, languages, programs and the quantity of international activities.

de Wit and Altbach (2021) argue that there is an impact of global trends in tertiary education on internationalization. They assert that higher education has experienced a massive expansion while the global knowledge economy has transformed tertiary education and research into a key player in the economic realm. In addition, they refer to other aspects that influence internationalization, i.e., autonomy and academic freedom, reputation rankings/excellence programs, and the changing economic and political climate. Consequently, they believe that internationalization is constantly evolving, which changes in response to local, national, regional, and global environments. As they assert, universities are still the main agents driving internationalization. A description of recent trends in institutional strategies, student and academic staff mobility, online mobility, internationalization at home and internationalization of research indicates that internationalization in HE is evolving where linking the global to the local seems imperative. They argue that internationalization has become a priority of a university's reform agenda asserting that this needs to be intentional, not as a goal in itself but must contribute to quality improvement for the benefit of all.

The above ideas are reflected, for example, in a survey by Ledger and Kawalilak (2020), who investigated how internationalization was defined, interpreted and applied in two Schools of Education in Canada and Australia by the use of the five policy threads: people, philosophy, place, processes and power [5Ps] (Ledger et al. 2015). In both institutions in both countries, internationalization was driven by economic rationalism, power inequities and neo-liberal process rather than focusing on people and place. Based on their results, the researchers argue that:

the intent (philosophy) of institutions (place) to internationalize (process) are impacted by interests (power) of individuals and institutions (people) and are often in conflict with internationalization descriptions presented by key scholars in the field (p. 663).

Thus, Ledger and Kawalilak (ibid) stress the importance of the underpinning philosophy of “conscientious internationalization” which focuses on human needs and puts in the center people being

agents of international-mindedness, practices and pedagogies. The focus is shifted from quantity to quality of relationships, ethical practices and pedagogically informed programs.

The quality of relationships is also discussed by Byram (2018) who argues that using the concept of internationalism and its moral dimension could give direction to internationalization processes. Byram (ibid, p. 153) argues that a normative view of internationalism involves a) the recognition of the benefits of globalization because it provides the conditions for societal cooperation, b) the pursuit through cooperation of understanding, peace and prosperity for all in equal terms, c) the implementation of democratic processes based on human rights through which equality in cooperation is assured.

Byram (op.cit) argues that at curriculum level internationalism among other things involves the development of intercultural competence helping academic staff, students, administrators and support staff understand each other and each other's academic cultures and the implementation of teaching and research processes which gives equal voice to all involved and a democratic approach to solving problems.

Intercultural competence is also discussed by Leask (2015) who develops her argument by asserting that it is useful to distinguish between the process of internationalization of the curriculum (IoC) and its product, an internationalized curriculum. She argues that this distinction helps to scrutinize the means and the end. As Leask (ibid) argues, one of the components of an internationalized curriculum involves organization of learning activities referring for example to Race (2010, as cited in Leask, 2015, p. 82) who maintains that "making sense of things" is a factor that underpins successful learning for students since it enforces learning through feedback. Leask (ibid) suggests that teachers are advised to provide opportunities to learners to engage in learning about intercultural learning through a series of meta-conversations that focus on how they and others have learned in intercultural situations. She discusses an example of an activity where students in small groups share stories of occasions when they did not behave properly in a cross-cultural situation.

In addition, Marantz-Gal & Leask's (2021) work reflects the tenets of internationalism concerning the implementation of teaching and research processes as delineated by Byram (op.cit). They analyzed the results of IoC case studies conducted in universities in Australia and Israel at different times over 10 years. It was found that IoC is best facilitated when institutions recognize faculty members' agency, leadership and differentiated needs in the process and respect their authentic experiences and motivations.

Internationalization strategy at universities

A key issue refers to the complexity of the university's internationalization strategy. Han and Zhong (2015, pp. 37-42) studied 50 top research universities worldwide by comparing their publicly stated mission statements and international strategies. The researchers offered a typological analysis of international strategy at macro, meso and micro level referring to specific university cases. They state that at macro level, university international strategy focuses on whether the university's international elements focus on input or output. Inputting of international elements relates to international students, faculty, teaching methods and materials whereas outputting international elements refers to the spread of a university's international strategy at macro, meso and micro levels, for example publishing research, promoting student and faculty mobility, setting joint degree programs etc. Macro level focuses on whether

international efforts focus on internal building or external extension being put under introversion, extraversion, expansion and proactivity.

Introversion focuses on the input of international elements and internal internationalization development: e.g., by emphasizing internationalization of the curriculum through for instance, an incorporation of more majors on global issues or recruitment of international academics. Expansion refers to cases where universities focus on the input of international elements and external extension of internationalization development: e.g., by emphasizing on attracting both international students and faculty. Extraversion refers to cases where universities focus on the output of international elements and internal building of internationalization development: e.g., by promoting student mobility such as overseas exchanges and summer internships. Finally, proactivity refers to cases where universities focus on the output of international elements and external expansion: e.g., by promoting outbound international experiences through for instance funding and administrative support and by encouraging external cooperation through for instance joint -degree programs (pp. 37-39).

At the meso level, implementing international strategy focus on whether it is institutional/policy oriented or individual/activity oriented being put under comprehensive, top-down, bottom-up and intermittent. Comprehensive refer to cases where both the institution and the individuals own their own international development being supported by sustainable policy and continuous activities. Top-down refers to cases when internationalization is implemented by institutional policies and support, for example development of strategic partnerships enabling international cooperation. Bottom-up refer to cases where internationalization is implemented by individuals or through certain activities, for example scholar-initiated international research projects or co-authored publication. Therefore, particular programs or activities can be developed encouraging the engagement of both students and faculty. However, this strategy may lack sustainable organizational support since it depends on individuals' resources and network. Intermittent refer to cases where neither the institution nor the individual initiates a university's internationalization often taking place at the beginning of a university's internationalization development with no continuous policy and activity (Han & Zhong, 2015, pp. 39-41).

Finally at the micro level, international strategy is based on the scale of their impact and the difficulty of their implementation. Thus, specific strategies used can be viewed and evaluated as ideal use, limited use or shelved use. Strategies as ideal use refer to those with more impact and less difficulty to implement, for example internationalization of the curriculum which has the potential of being beneficial for all students and this can be done with few additional resources when compared to mobility programs. Strategies as limited use refer to those with less impact and less difficulty or more impact but more difficulty, for example encouraging staff to participate in conferences requires less input from the university but the impact relies on the relevant individuals and on their discipline. On the other hand, encouraging students to participate in mobility programs can be developed as a mechanism that could benefit all students but it requires significant financial and human resources being somewhat difficult to implement. Shelved use refers to strategies with relatively smaller impact but larger difficulty, for example the creation of a research center linking universities all over the world could be complicated due to research and legal jurisdictions without necessarily increasing productivity or international impact (Han & Zhong, (2015, pp. 41-42).

Han and Zhong (ibid) argued that irrespective of the route(s) a university chooses to use, internationalization should be related to whether a university can undertake teaching and research based on international standards and whether the world can be positively influenced by its output, graduates and service.

Another large-scale study was conducted by Crăciun (2019) who reconceptualized higher education internationalization by building a typology of university internationalization strategies employed across the globe. The researcher conducted computer-assisted content analysis and qualitative interviewing of policy documents, that is qualitative analysis with a specific list of questions pointed out by the literature. The sample included 189 countries included in the World Higher Education Database (WHED) built by the International Association of Universities (IAU) which gathers systematic information about higher education systems, institutions and credentials around the world (International Associations of Universities, 2015, as cited in Crăciun, ibid p. 66). Another 10 countries from UN members which were not included in the WHED list because they were small island states without fully fledged higher education systems and no higher education policy per se were also examined.

It was found that internationalization is not an end in itself but a means to a wider goal while countries pursue different goals and priorities in relation to the process. Two types of national higher education internationalization approaches were found to be pursued by countries a) inward internationalization focusing on international student mobility and the internationalization of universities and study programs/courses offered and b) outward internationalization focusing on international student mobility and the internationalization of research innovation and development through international cooperation.

Specifically, (Crăciun, ibid, pp 153-154) found that on the one hand countries that embrace an inward-looking approach to internationalization tend to focus on developing internationalization at institutional level by offering new study programs with an intercultural/international focus, for example developing a diverse and flexible innovative education and training system offering innovative education products and services (Australia) or establishing international classrooms (Netherlands).

On the other hand, countries that are characterized by an outward-looking approach to internationalization tend to focus on research innovation and development via cooperation with other countries, for example providing access to research environment of elite international caliber (Denmark) or providing top researchers with the very best research equipment (Switzerland).

These findings lend support to conceptualizing internationalization as a) a planned process b) that covers a variety of measures that change the purposes, functions and delivery of higher education c) with a specific goal in mind (Crăciun, op.cit, p.171). It is argued that this typology helps to clarify the priorities of national higher education internationalization strategies revealing that in all contexts, internationalization is concerned with international mobility leading to homogenization of measures undertaken to promote internationalization.

Crăciun's (op.cit) findings reflect the argumentation put forward by Soliman, Anchor and Taylor (2019) who refer to Mintzberg and Waters' (1985) "deliberate or emergent typology" (as cited in Soliman, Anchor & Taylor, 2019, pp. 1415-1416) dictating that deliberate strategies aim to achieve long-term goal considering intended behaviors, analytical processes and action plans. Soliman, Anchor and

Taylor (ibid) argue that the application of the concept of deliberate strategy at university implies that adopted international strategies define key international issues, analyze and assess internal and external circumstances (strengths, weaknesses, opportunities and threats), and takes into consideration an organization's values and its corporate social responsibility towards the community (Ansoff, 1980, as cited in Soliman, Anchor & Taylor, 2019, p.1415). The researchers further argue that upon completion of this analysis action plans to achieve goals are articulated.

Pedagogy of internationalization

Despite its complicated nature what needs to be kept in mind is that internationalization of higher education is not something new since as Brown (1950, cited in Knight & de Wit, 1995, p. 6) argues, universities have always been international in character in terms of “the universality of knowledge”. Since universities by nature are committed to advance human knowledge being thus international, the pedagogical dimension within an internationalization context needs to be scrutinized.

However, there is scarce evidence on empirical research on pedagogical issues in classroom settings within an internationalization context. Wihlborg (2009) argued that there is a lack in the literature on teachers' and students' experiences of internationalization concerning their own educational contexts from a pedagogical perspective. Her research findings imply that teachers' lack of pedagogical awareness influences students' learning outcomes, therefore the shift in research perspective should be switched from an external one to a relational context-based one in order to understand how internationalization in HE is developed in practice.

Lomer and Mittelmeier (2021) conducted a systematic literature review of research from 2013-2019 regarding specific pedagogies relating to international students in the UK. Their work revealed that pedagogies of internationalization is not yet an established field of research. It was found that there is limited evidence on specific classroom pedagogies. The review indicated that there was a lack of evidence in the categorization of international students disregarding diversity present within international student groups, especially concerning their cultures, histories, and prior experiences. There was a tendency to categorize international students' experience in a homogeneous way ignoring intersectionalities which in other cases would be applied to home students, e.g., impacts of race, gender or socioeconomic background on pedagogic experiences.

Tannock (2018, p. 190) also refers to the problem of a homogeneous approach about international students arguing that there is a fragmentation of equality in the internationalized university referring to a recognized matter in academic literature on global justice known as the “metric objection- the concern that simply measuring what equality is and should be can become increasingly difficult at a global as opposed to national level” (Armstrong 2009, as cited in Tannock, ibid, p. 84). Tannock (ibid) asserts that in the UK, there is scarce detailed and comparable data on student background and prior levels of attainment for international than for home students. It is suggested that universities need to “construct” the international student attainment gap as an educational and social problem by collecting and reporting ethnicity attainment data.

Ethnicity attainment data can be gathered by various ways, for example Jin and Cortazzi (2017) discuss the use of the concept of “cultures of learning” which means learning about learning and focuses

on different cultural ways of learning brought to international contexts. Attitudes and beliefs about how to learn, and expectations in classrooms regarding roles and relationships learned through socializing in previous schooling need to be examined. The researchers argue that there are tensions between recruiting international students and meeting their specific educational, social, psychological and intercultural needs. As they argue, there is a need to include “cultures of learning” in policies and practices to sustain internationalization in higher education. Teachers’ professional development and training on the development of student-centered concepts of learning to engage systematically with “cultures of learning” (Jin & Cortazzi 1993, 2002, 2013, as cited in Jin & Cortazzi, *ibid*, p. 241) is strongly suggested.

Wimpenny et al. (2020) carried out a literature review responding to the work by Barometer of the European Association for International Education (Sandström & Hudson, 2019, as cited in Wimpenny, Beelen & King, 2020, p 229) where it was found that there is a correlation between offering “training” for and perceiving progress in internationalization. The Barometer report (Sandström & Hudson, p. 20, as cited in Wimpenny, Beelen & King, 2020, p. 229) states that the correlation includes training on “international learning outcomes, internationalization of the curriculum and teaching methods”. Wimpenny et al. (*ibid*) found that currently little is known regarding actions by universities for teachers’ professional development for teaching to foster internationalization and support internationalization of the curriculum initiatives and to what extent, a systemic approach to internationalization is followed.

Culturally responsive pedagogy

CRP is an approach to teaching and learning that uses students' cultural orientations, background experiences and ethnic identities as paths to facilitate teaching and learning (Gay, 2000). Gay (2002) explains that CRP is about teaching practices that consider cultural characteristics such as values, traditions, language, communication, learning styles, and relationship norms. As Sleeter (2012) asserts, CRP is broadly converged with a variety of theories and practices of multicultural teaching, equity pedagogy, sociocultural teaching, and social justice teaching. More recently, Kieran and Anderson (2019) argue that CRP refers to a technique where teachers are committed to cultural competence, establish high expectations and position themselves both as facilitators and learners. It should be noted that there is a distinction between CRP and multicultural education. The former must respond to the cultures actually present in the classroom whereas the latter can be delivered to a classroom comprising students from the same culture where the content presented is representative of various cultural perspectives. It can be argued therefore that CRP is one means to the ultimate objective of multicultural education for all (Rychly & Graves, 2012).

Many scholars have developed frameworks to describe the nature and characteristics of culturally responsive teachers as shown in table 1 below.

Table 1: Frameworks for CRP (adapted from Brown, 2007, p. 59)

<i>Author</i>	<i>Framework</i>
Ladson-Billings (1995a)	<ul style="list-style-type: none"> • support students to experience academic success • support students to develop and/or maintain cultural competence • support students to develop a critical consciousness
Wlodowski & Ginsberg (1995)	<ul style="list-style-type: none"> • create learning atmospheres in which students and teachers feel respected by and connected to one another • create favorable dispositions toward the learning experience through personal relevance and choice • create challenging, thoughtful learning experiences that include student perspectives and values • create an understanding that students are effective in learning something they value
Gay (2002)	<ul style="list-style-type: none"> • develop a cultural diversity knowledge base • design culturally relevant curricula • demonstrate cultural caring, and build a learning community • establish cross-cultural communications • establish cultural congruity in classroom instruction
Villegas & Lucas (2002)	<ul style="list-style-type: none"> • are socio-culturally conscious • have affirming attitudes toward students from culturally diverse backgrounds • have the commitment and skills to act as agents of change • have constructivist views of learning • know about the lives of their students and use that knowledge to give them access to learning

However, a critical issue refers to assessing degrees of likelihood and uncertainty (Halpern (1998) when bringing CRP into effect. Rychly and Graves (op.cit) argue that becoming culturally responsive is quite personal. In their literature review, culturally responsive teachers a) need to be empathetic and caring; b) reflective about their beliefs about people from other cultures; c) reflective about their own cultural frames of reference; d) knowledgeable about other cultures (Gay, 2002; Dalton, 1998; McAllister & Irvine, 2002; Nieto, 2004, as cited in Rychly & Graves, 2012, p 45). It is indicated that it is probably best for teachers to engage with reflection as a process getting training in using a structured way to provide constructive feedback for reflections. Similarly, Han et al. (2014) found in their survey that teachers experienced difficulty defining CRP in higher education while the importance of building relationships with students when enacting CRP was identified since, for example, they encountered several different tensions

with students when trying to actualize CRP. The researchers suggested that based on findings, universities need to offer support and professional development for teachers to become culturally responsive.

Adding more on this, Milner (2019) moreover discusses the connected construct culturally responsive classroom management indicating that teachers should work on equitable practices responding to the particulars of the context. Referring to Milner (2010, as cited in Milner, 2019, p. 2) he argues that homogeneous communities do not exist and institutions should provide teaching in ways that are perceivable to learners. This implies that students are experts of their experiences and should be placed at the center of teaching and learning in a classroom (Milner, 2007, as cited in Milner, 2019, p. 2).

The Internationalized Nature of PBL

PBL and its relationship to institutional policy

Literature on PBL practices all over the world indicate that the “original” model has been adapted in a variety of forms across fields of study (Scholkmann, 2020). Scholkmann (ibid) explains that the original PBL was developed during the 1960s and 1970s at McMaster University in Canada while early most known adoptions were implemented in Maastricht University in Netherlands and Aalborg University in Denmark. In her work, she explains that the Maastricht model which was refined based on the original McMaster template used a “seven jumps” method which uses several short-time sequence pre-defined cases during a semester and close supervision of group tutorials (Wijnia et al., 2019 as cited in Scholkmann, 2020,p. 3), The Aalborg model, on the other hand, uses students’ self-selected problems in long projects during a semester encouraging students to engage in self-organization (Kolmos et al., 2019 as cited in Scholkmann, 2020,p. 3) More recently, PBL variations include the short-timing Maastricht model of the “One Day-One Problem” approach (O’Grady et al., 2012, as cited in Scholkmann, 2020, p.3) and the “Flipped PBL” model in the Australian context (Hendry et al., 2017, as cited in Scholkmann, 2020, p. 3).

It is useful to frame PBL within institutional policies. Codd (1988, p. 235) argues that policy includes but extends beyond formal policy documents where “Policy is taken here to be any course of action (or inaction) relating to the selection of goals, the definition of values or the allocation of resources”. Bouhuijs argues (2011) that there are certain implementation PBL problems within institutional policies. Specifically, he argues that PBL demands a minimum of changes in the organizational structure and culture. The implementation management is dependent on strategic decisions, educational objectives, and very much on the resources available. Bouhuijs (ibid) clarifies his arguments by referring to an epistemological controversy about what knowledge is and what students should learn. He asserts that traditional universities are committed to “true knowledge” which clashes with the constructivist background of PBL where students are allowed to deal with imprecise ideas developed as they work with real-life events considering various theories. In PBL students are not corrected on their imprecise ideas about certain issues but instead they are guided to develop new knowledge using available epistemological tools.

Bouhuijs (op.cit) moreover refers to the culture of professionalism arguing that modern academia indicates that academics are highly individualistic and independent, putting their discipline as more important than the organization in which they work. PBL on the other hand presupposes co-operation across disciplines in order to deliver an integrated curriculum requiring common goals and teamwork in order support student learning. He asserts that faculty development is needed in order to introduce the teaching

implications of PBL, noting that opportunities should be created for the teacher to understand and become motivated about the advantages of PBL and the nature of teaching skills required.

Responding to Bouhuijs (op. cit), Scholkmann (2020, p. 4) refers to cases where individual teachers implemented PBL in a single course creating thus PBL variations which embraced the PBL idea under specific local and cultural conditions, for example incorporating classical PBL casework into a series of lectures (Scholkmann, 2017). As she notes, these individual variations were not implemented within an official institutional PBL strategy as individuals were interested in using PBL as an opportunity for educational change and therefore led to the formation of hybridized forms of PBL practice. It is stressed that since these variations were implemented under a non-official institutional policy, it is possible that when they appear, they would likely change from curricular demands, for example assessment practices or specific pedagogical requirements.

Frambach et al. (2019) discussed representative examples of published empirical studies relating to PBL's perceived implementation problems. It is argued that PBL needs to be adapted to the local and institutional socio-cultural context, for example with regard to tutors' approaches when guiding PBL tutorials. The researchers assert that within a globalization context, since cultural factors shape PBL processes, experiences and outcomes, PBL cannot be analyzed from a universalist discourse since PBL as a "singular" concept ideally should be implemented anywhere in more or less similar ways. Instead, the culturalist discourse operationalizes PBL as a "plural" concept reflecting values and principles of the context where it was developed and thus should be adapted to contexts being implemented. They conclude that PBL globally can only be discussed in the plural sense by emphasizing the use of plural expressions such as "PBL approaches" or "PBL strategies". It is argued that institutions might consider useful to define PBL and focus on how they interpret it and shape and implement it locally.

PBL and its relationship to culturally responsive pedagogy

PBL involves a small group of students analyzing a problem, identifying relevant facts, and applying existing knowledge and experiences to solve a problem. Miner-Romanoff et al. (2019) argue that a PBL activity should be a typical work-related issue or situation that includes missing information or unclear answers, such as ill-structured case studies. Ill-structured case scenarios ask students to explore resources and engage in self-directed information-seeking.

PBL is characterized by using "real world" authentic problems as a context for students to learn critical thinking and problem-solving skills (Barrows, 1996). Barker (2011) argued that internationalization of the course content and design is achieved through real-life or simulated case studies, which examine cross-cultural communication, negotiation and conflict resolution. Teaching embraces a more informal rapport. Tutors participate in the tutorial groups guiding the group process by asking critical questions and by sharing their knowledge. The nature of this approach shows that PBL reflects internationalization as a didactical approach since as Maurer and Neuhold (2012) argued in PBL there are preconditions and challenges on three levels: on the level of curriculum planning, on the level of course planning (course assignment and other forms of preparation) and on the level of implementation (role of tutors, students' performance and group dynamics). The researchers recognized that the skills

dimension and group dynamics are very important and tutors need training on switching their role from lecturer to facilitator.

Ju et al. (2016) investigated challenges experienced by Korean medical students and tutors during their PBL sessions from a cultural framework using Hofstede's cultural dimensions (1986, 1996). Ju et al. (2016) also offered a discussion where they explain how Hofstede's cultural dimensions (1986) correspond to the PBL approach clarifying how these dimensions fit in a cultural profile promoted by the PBL system. Specifically, Ju et al. (2016, p. 4) argued that in PBL, the cultural dimension power distance is small since the educational process is student-centered and teachers expect students to take the initiative in communication. The cultural dimension uncertainty avoidance is low since students expect open-ended situations and teachers are allowed to say "I don't know". The cultural dimension individualism vs collectivism appears to be a combination of individualism with collectivism since students are expected to speak up in class in response to a general invitation by the teachers, conflicts can be salutary, and formal harmony should be maintained (collectivism). The cultural dimension femininity vs masculinity shows that PBL promotes femininity since students' social adaptation is regarded as important and the quality of learning and intrinsic interests are stressed. Finally, the cultural dimension long-term vs. short term normative orientation indicates that PBL encourages the long-term since long-term virtues (e.g., perseverance) are important since students may be patient with the results of their learning. It was thus found that Korean students and teachers had a learning culture which is the exact opposite of the type of culture that might facilitate PBL (large power distance, high uncertainty avoidance, collectivism with minor individualism, masculinity, and short-term orientation). The researchers suggested that the promised benefits of PBL could be increased by implementing culturally responsive learning strategies in order to counterbalance the inherited cultural characteristics of the learners.

Muller and Henning (2017) discussed PBL in the German context. They researched the implementation of a project at the University of Applied Sciences in Bremen, Germany, aiming to foster PBL. Selected instructional and pedagogical difficulties, for example an issue related to the practice of facilitating students' work in PBL were discussed. It was observed that German students did not dedicate proper time to define the problem but instead they started producing solutions. Students even got confused with the logic of the seven very detailed steps of PBL while there was lack of proper questioning strategies which according to the researchers' interpretation was attributed to the German traditional explaining culture. As a result, the researchers decided to facilitate students by providing a research question instead of a problem statement in order to offer a proper guide to students helping them search for answers. After doing so, it was observed that students improved in their discussions focusing more on content and arguments than on PBL steps becoming thus more self-sufficient. The main implication is that adjusting some PBL elements seems to help students improve their performance.

Coelen and Geitz (2016) argued that the impact of cultural diversity on collaborative learning in PBL is critical. It was argued that in PBL, it is crucial to consider the extent to which students in intercultural settings are able to work together as an effective team underlining that cultural diversity can both enhance team effort and decrease it. This was identified in surveys by Skinner et al. (2016) and Jiang et al. (2021). Skinner et al. (ibid) found that there is a dual nature of silence during PBL in two dental schools in Australia and Ireland. Students' comments showed that they were sometimes dissatisfied with

being quiet explaining that this silence has been imposed on them. They noted that some were silent because they felt their contributions were rejected and thus gave up. Others reported that group practices such as speaking loudly and quickly resulted in prohibiting any entry point for others while using slang English and humor was not understood by everyone. The researchers recognized that there is a need to look for deeper cultural and social reasons for classroom behaviors wondering whether the quiet people's behavior is due to a possible view of politeness of not interrupting while for others it might be considered acceptable to jump into the conversation. Jiang et al. (ibid) interviewed Chinese engineering master students without prior knowledge and experience in PBL enrolled in the fall of 2020 at Aalborg University, Denmark. The Chinese students reported challenges concerning teamwork. It was found that the Chinese got frustrated during teamwork experiencing differences from their group mates in ways of thinking and views towards PBL. For example, it was reported by the Chinese that the Danish had a narrow-minded interpretation of the nature of PBL while the Chinese regarded it as a flexible learning method to gain knowledge. As a result, the Chinese working in a group of Danish students reported that they had to accept their way of completing the project.

Some Reflections and Future Research

Based on the discussion in the previous sections, it seems that the complexity of PBL implementation reflects Kerr's (1994) argument which dictates that what reigns in tertiary education is the tension between a university's universal nature and its embedding in national and regional contexts. I argue that a careful examination of the nature of PBL reaffirms its commitment to the design of appropriate pedagogy of internationalization within its practice. I specifically suggest that since PBL's nature appears to be internationalized, universities should implement research policies justifying the need to design a specific pedagogy of internationalization. The literature discussed in this paper highlights the value of CRP and I suggest that it can be used as a pedagogy of internationalization that needs to be officially researched and used if effective at local contexts during PBL practices. Within the context of CRP, each teacher is encouraged to design appropriate strategies that suit the institution's educational policies and their students' needs responding thus to Frambach et al. (2019) who suggested using PBL approaches or strategies.

For example, Katsara and De Witte (2019) suggested Socratic questioning as a reinforcing strategy to set the scene for a successful PBL tutorial in the Dutch context. The researchers built their argument by referring to earlier work by Rogal and Snider (2008) and Banning (2005). The former argue that Socratic questioning is inherent in PBL learning since students question their knowledge when confronting new knowledge, while the latter argues that through Socratic questioning, teachers without revealing information to students, elicit responses from them with the aim to encourage them deconstruct knowledge. Within this theoretical context, Katsara and De Witte (ibid) found that during a Socratic seminar, a sample of postgraduate Dutch students in University of Maastricht appeared to struggle criticizing knowledge from well cited authors in the literature experiencing thus some difficulty in conditioning self-directed learning. Students appeared to be in favor of a mutual relationship between the learner and the educator in managing the learning process. The researchers suggested that Socratic

questioning could be used as a strategy prior PBL tutorials where students would benefit from activities, for example, discussions on literature reviews on debatable issues helping them comprehend “transformative academic knowledge” which challenges some key assumptions about the nature of knowledge and some of their major paradigms, theories or findings (Banks, 1996).

Future research on students’ experiences during PBL practices would prove useful for teachers wishing to become more culturally responsive. The use of The Student Voice Pedagogy Instrument within PBL practices might be helpful where students are invited to participate in a survey, researching how one aspect of appropriate implementation of internationalization, that is how their support to learning within teaching at university is developed in practice. The suggested research encourages students to respond and express their perceptions and feelings of the learning and teaching process of the PBL model used in their department and institution. Their stories of experience will be shaped through discussions with teachers in a dialogue acting thus as collaborators rather than informants guided by the researcher’s agenda (Altork, 1998, as cited in Moen, 2006, p. 61). Moen (2006) situated the narrative research approach within the framework of sociocultural theory. He argued that in narratives, the complexity of teaching and the classroom is not divided into elements but instead it occurs as an integrated part of the whole enabling us to understand a human being’s action by examining the social, cultural, and institutional context in which the particular individual operates.

Students thus contribute to forming specific variables that might be valuable for teachers to consider when designing the appropriate instructional delivery. It encourages both parties to engage with reflection as a process, which is a crucial step in CRP. All in all, this research structure embraces the value of “conscientious internationalization” and the related use of the concept of internationalism since it encourages all to act as agents of international-mindedness (Ledger & Kawalilak, 2020) having an equal and democratic voice to solve problems (Byram, 2018, Marantz-Gal & Leask, 2021).

The results of this survey can be used to produce a confidential report helping departments improve teaching that covers their students’ needs. I recommend the publication of selected- relevant to the readers’ interests -insights of this report, to become part of a portfolio of a series of such studies carried out over the years. This information will be helpful in providing the rationale for the development of possible departmental CRP training sessions for teachers. Positive or negative evaluation of such training will determine the extent to which such an initiative could be part of a departmental pedagogy of internationalization policy development within PBL practices. Therefore, these training sessions would appear to promote the application of the concept of “deliberate strategy” (Soliman, Anchor & Taylor, 2019) implementing international strategy at micro level under ideal use, which refer to strategies with more impact and less difficulty to implement (Han & Zhong, 2015). Specifically, PBL implementation could be more effective by reconceptualizing its pedagogical approach having the potential to be beneficial for all students and this could be achieved through teachers’ training on CRP.

Acknowledgements

The author of this paper would like to express deep appreciation and gratitude to Kristof De Witte, who is a Professor at the Faculty of Economics and Business at KU Leuven, Belgium and holds the chair

in ‘Effectiveness and Efficiency of Educational Innovations’ at United Nations University (UNU-MERIT) at Maastricht University, the Netherlands for his constructive comments and suggestions

References

- Acton, R. (2019). Mapping the evaluation of problem-oriented pedagogies in higher education: A systematic literature review. *Education Sciences*, 9(4), 269-284. <https://doi.org/10.3390/educsci9040269>
- Altbach, P. G. (2015). AHELO: The myth of measurement and comparability, *International Higher Education*, 82, 2–3.
- Barker, M. (2011). *GIHE Good Practice Guide to Internationalizing the Curriculum*. Griffith Institute for Higher Education. Retrieved from: http://www.griffith.edu.au_data/assets/pdf_file/0006/345291/Internationalising-the-Curriculum.pdf
- Barrows, H. S. (1996). Problem-based learning in medicine and beyond. In L. Wilkerson and W.H. Gijselaers (Eds.), *New directions for teaching and learning: Bringing problem-based learning to higher education: Theory and Practice*, (pp. 3-11). San Francisco: Jossey-Bass
- Bouhuijs, P. (2011). Implementing Problem Based Learning: Why is it so hard? *Revista de Docencia Universitaria*, 9(1), 17–24.
- Brown, M.R. (2007). Educating all students: Creating culturally responsive teachers, classrooms, and schools. *Intervention in School and Clinic*, 43(1), 57-62.
- Byram, M. (2018). Internationalization in higher education – an internationalist perspective. *On the Horizon*, 26(2), 148–156. DOI 10.1108/OTH-11-2017-0090
- Codd, J. (1988). The Construction and Deconstruction of educational policy documents. *Journal of Educational Policy*, 3 (5), 235-48.
- Coelen, R.J., and Geitz, G. (2016). Problem Based Learning and Internationalization are Tricky Bedfellows. In K.W. Van der Hoek, H. Blom and R. Flohr. (Eds.), *Learning inquisitiveness-About Education and Problem Based learning*, (pp. 69- 84). Leeuwarden- Stenden University
- Crăciun D. (2019). *Systematizing national higher education internationalization strategies: Reconceptualizing a process* (Doctoral thesis, Central European University). Wien, Austria: Yehuda Elcana Center.
- De Wit, H., and Altbach, P. G (2021) Internationalization in higher education: global trends and recommendations for its future, *Policy Reviews in Higher Education*, 5(1), 28-46 <https://doi.org/10.1080/23322969.2020.1820898>
- Dixon-Woods M, Bonas S, Booth A, Jones DR, Miller T, Shaw RL, Smith JA, Young B. (2006). How can systematic reviews incorporate qualitative research? A critical perspective. *Qual Res*, 6 (1), 27 – 44. DOI: [10.1177/1468794106058867](https://doi.org/10.1177/1468794106058867)
- Feldman, A. (2014). Culturally responsive pedagogy in higher education: A collaborative self-study. *Studying Teacher Education*, 10, 290–312. <http://doi.org/10.1080/17259644.2014.958072>
- Frambach, J.M., Talaat, W., Wasenitz, S., Martimianakis, M.A. (2019). The case for plural PBL: An analysis of dominant and marginalized perspectives in the globalization of problem-based learning. *Adv. Health Sci. Educ*, 24, 931–942. <https://doi.org/10.1007/s10459-019-09930-4>
- Gay, G. (2000). *Culturally responsive teaching: Theory, research and practice*, New York, NY: Teachers' College Press. *Internationalizing higher education framework*.
- Gay G. (2002). Preparing for culturally responsive teaching. *Teach Educ*. 53(2), 106-116. <https://doi.org/10.1177/0022487102053002003>
- Grant M.J, Booth A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Information and Libraries Journal*, 26(2), 91–108. DOI: [10.1111/j.1471-1842.2009.00848](https://doi.org/10.1111/j.1471-1842.2009.00848).

- Halpern, D. F. (1998). Teaching critical thinking for transfer across domains. Dispositions, skills, structure training, and metacognitive monitoring. *The American Psychologist*, 53(4), 449-455. <https://doi.org/10.1037/0003-066X.53.4.449>
- Hallinger, P., & Lu, J. (2011). Implementing problem-based learning in higher education in Asia: challenges, strategies and effect. *Journal of Higher Education Policy and Management*, 33(3), 267–285 <http://doi.org/10.1080/13600.80X.2011.56500>
- Hammerstrøm, K., Wade, A., Jørgensen, A.M.K. (2010). *Searching for studies: A guide to information retrieval for Campbell*. Campbell Systematic Reviews 2010: Supplement I. Oslo: The Campbell Collaboration.
- Han, H. S., Vomvoridi-Ivanović, E., Jacobs, J., Karanxha, Z., Lypka, A., Topdemir, C., & Feldman, A. (2014). Culturally responsive pedagogy in higher education: A collaborative self-study. *Studying Teacher Education*, 10, 290–312. <https://doi.org/10.1080/17425964.2014.958072>
- Han, S & Zhong, Z. (2015). Transforming into global universities: An analysis of research universities' international strategies. *International Journal of Education*, 4(1), 28-47. doi 10.1163/22125868-12340043
- Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of Intercultural Relations*, 10, 301-320.
- Hofstede, G. (1996). Differences and danger: Cultural profiles at nations and limits to tolerance. *Higher Education in Europe*, 21(1), 73- 94. <http://doi.org/10.1080/0379772960210108>
- Jiang, D., Dahl, B., Bøgelund, P. (2021) Adaptability to Problem-based Learning at Aalborg University: Experience from four first-year Chinese engineering graduate students. In A. Guerra, J. Chen, M. Winther, A. Kolmos, A. & S.R. Nielsen (Eds.). *Educate for the future: PBL, Sustainability and Digitalization 2021*. (pp 131-140). 8th International Research Symposium on PBL (IRSPBL), Aalborg University: Aalborg.
- Jin, L. & Cortazzi, M. (2017). Practicing cultures of learning in internationalizing universities. *Journal of Multilingual and Multicultural Development*, 38(3), 237-250 <https://doi.org/10.1080/01434632.2015.1134548>
- Ju, H., Choi, I., Rhee, B., & Tae-Lee, J. (2016) Challenges Experienced by Korean Medical Students and Tutors During Problem-Based Learning: A Cultural Perspective. *Interdisciplinary Journal of Problem-Based Learning*, 10(1), Article 8 <https://doi.org/10.7771/1541-5015.1565>
- Katsara, O. (2014). The need to investigate the Greek cultural perspective within teaching practice of an ESAP class. *Asian ESP Journal*, 10(2), Article 5, 88-113.
- Katsara, O. and De Witte, K. (2019). How to use Socratic questioning in order to promote adults' self-directed learning, *Studies in the Education of Adults*, 51(1), 109-129 <https://doi.org/10.1080/02660830.2018.1526446>
- Katsara, O and De Witte, K. (2020). The need to investigate the pedagogical dimension of specific learning settings within the context of internationalization: A literature review. In EEPEK (Eds.) *Proceedings for the 5th International Conference for the Promotion of Educational Innovation*. (632-641). Larissa, Greece: EEPEK editions
- Kerr, C. (1994). *Higher Education Cannot Escape History: Issues for the Twenty-First Century*. SUNY Series *Frontiers in Education*. Albany: State University of New York Press.
- Kieran, L., & Anderson, C. (2019). Connecting universal design for learning with culturally responsive teaching. *Education and Urban Society*, 51(9), 1202–1216. <https://doi.org/10.1177/0013124518785>
- Knight, J. and de Wit, H. (1995), Strategies for internationalization of higher education: historical and conceptual perspectives. In de Wit, H. (Ed.), *Strategies for Internationalization of Higher Education: A Comparative*

- Study of Australia, Canada, Europe and the United States of America* (99-120). Amsterdam: European Association for International Education (EAIE).
- Knight, J. (2015). Meaning, rationales and tensions in the internationalization of higher education. In S. McGrath & Q. Gu (Eds.), *Routledge handbook of international education and development* (pp. 345–359). Abingdon: Routledge
- Leask, B. (2015). *Internationalizing the Curriculum*. Abingdon: Routledge.
- Ledger, S., and Kawalilak, C. (2020). Conscientious internationalization in higher education: contextual complexities and comparative tensions. *Asia Pacific Education Review*, 21(4), 653-665 <https://doi.org/10.1007/s12564-020-09650-0>
- Lomer, S. and Mittelmeier, J. (2021). Mapping the research on pedagogies with international students in the UK: a systematic literature review, *Teaching in Higher Education* DOI: 10.1080/13562517.2021.1872532
- Marantz-Gal, A., & Leask, B. (2021). Internationalizing the curriculum: The power of agency and authenticity. *New Directions for Higher Education*, 2020(192), 39- 50. <https://doi.org/10.1002/he.20390>
- Maurer, H., and Neuhold, C. (2012). Problems everywhere? Strengths and challenges of a problem-based learning approach in European studies. In *APSA Teaching & Learning Conference*, Washington, 17-19 February, (pp. 1-22). Retrieved from: SSRN://<https://ssrn.com/abstract=1997614>.
- Milner, H. R. (2019). Culturally Responsive Classroom Management. *Oxford Research Encyclopedia of Education*. <http://doi.org/10.1093/acrefore/9780190264093.013.782>
- Miner-Romanoff, K., Rae, A., & Zakrzewski, C.E. (2019). A Holistic and Multifaceted Model for Ill-Structured Experiential Problem-Based Learning: Enhancing Student Critical Thinking and Communication Skills. *Journal of Problem Based Learning in Higher Education*, 7(1), 70–96
- Moen, T. (2006). Reflections on the narrative research approach. *International Journal of Qualitative Methodology*, 5(4), 56–69. <https://journals.sagepub.com/doi/pdf/10.1177/160940690600500405>
- Muller, T., & Thomas Henning, T. (2017). Getting Started with PBL A Reflection. *Interdisciplinary Journal of Problem based Learning*. 11(2), Article 8. <https://doi.org/10.7771/1541-5015.1682>
- Rychly, L. & Graves, E. (2012) Teacher Characteristics for Culturally Responsive Pedagogy. *Multicultural Perspectives*, 14(1), 44-49 <http://doi.org/10.1080/15210960.2012.646853>
- Scholkmann, A. (2020). Why don't we all just do the same? Understanding variation in PBL implementation from the perspective of Translation Theory. *Interdisciplinary Journal of Problem-Based Learning*, 14(2), 1-16 <https://doi.org/10.14434/ijpbl.v14i2.28800>
- Skinner, V.J., Braunack-Mayer, A., and Winning, T.A. (2016). Another Piece of the Silence in PBL Puzzle: Students' Explanations of Dominance and Quietness as Complementary Group Roles. *Interdisciplinary Journal of Problem-Based Learning*, 10(2), Article 8. <https://doi.org/10.7771/1541-5015.1607>
- Sleeter, CE (2012) Confronting the marginalization of culturally responsive pedagogy. *Urban Education*, 47(3), 562-584. DOI: 10.1177/0042085911431472
- Soliman, S., Anchor, J., & Taylor, D. (2019) The international strategies of universities: deliberate or emergent? *Studies in Higher Education*, 44(8), 1413-1424. <https://doi.org/10.1080/03075079.2018.1445985>
- Tannock, S. (2018). Constructing the international-home student attainment gap. In S. Tannock (Ed.), *Educational equality and international students: Justice across borders?* (pp. 185–214). Cham: Palgrave Macmillan
- Tannock, S. (2018). The Fragmentation of Equality in the Internationalized University. In S. Tannock (Ed.), *Educational equality and international students: Justice across borders?* (pp. 69-92). Cham: Palgrave Macmillan
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resources*

Development Review, 4, 356–367. DOI: [10.1177/1534484302578283](https://doi.org/10.1177/1534484302578283)

Wihlborg, M. (2009) The Pedagogical Dimension of Internationalization? A Challenging Quality in Higher Education for the Twenty-First Century. *European Educational Research Journal*, 8(1), 117-132. <https://doi.org/10.2304/eej.2009.8.1>.

Wimpenny, K., Beelen, J. & King, V. (2020) Academic development to support the internationalization of the curriculum (IoC): a qualitative research synthesis. *International Journal for Academic Development*, 25(3), 218-231. <https://doi.org/10.1080/1360144X.2019.1691559>

OURANIA KATSARA, PhD, is a Senior Teaching Fellow at University of Piraeus. Her research interests include international education, intercultural communication, internationalization of the curriculum (IoC), internationalization at Home (IaH).