

University offering work-integrated learning dual study programs

AXEL GERLOFF¹

Duale Hochschule Baden-Wuerttemberg Praesidium, Stuttgart, Germany

KARIN REINHARD

Duale Hochschule Baden-Wuerttemberg Ravensburg, Ravensburg, Germany

There is mutual agreement about the need for internationalization in higher education. However, there is no consensus regarding the best practice. Universities offering cooperative and work-integrated education have a comparative advantage in providing their graduates with capabilities needed on the labor market. They face the challenge to develop an internationalization strategy that reflects the practice-orientation of their study programs. The key question is how to use the specific feature of dual education to expand globally. This paper analyzes the approach of Duale Hochschule Baden-Wuerttemberg (DHBW) as Germany's first university to integrate academic studies and work experience. It examines student exchanges, study-abroad internship tandems, short-term programs as well as the implementation of the DHBW model in other countries. The strengths and weaknesses of these approaches as well as their conformance with the objectives of the internationalization strategy are evaluated.

Keywords: Dual education, employability, international collaboration, internationalization strategy

The Duale Hochschule Baden-Wuerttemberg (DHBW) is the first university in Germany to integrate academic studies and practical experience. Almost 40 years ago, the model of the University was initiated by large German companies – among others Robert Bosch and Daimler-Benz. Its unique characteristics are the result of participation of training companies in the university and the integration of work experience in all study programs. A key question for developing DHBW's internationalization strategy is how to use the specific feature of cooperative and work-integrated education to expand globally. On the one hand, concepts have to be developed that allow DHBW students to study abroad although most partner institutions do not offer similar study programs. On the other hand, foreign students must be able to participate in the DHBW system without having contracts with partner companies.

The first section of this paper outlines the key features of the DHBW model and explains the special study concept of alternating theoretical and practical phases. Secondly, the skill set acquired through international mobility is compared to skills required by employers. The essential role of internationalization in higher education for a globalized world is analyzed. Nowadays, university graduates must possess the appropriate skills to act in an international context and work within multicultural business settings. The third section looks at different DHBW approaches to engage in international collaboration. A variety of concepts are examined that can lead to mutually beneficial cooperation between DHBW and international partners. Moreover, the strengths and weaknesses of different approaches are evaluated. The last section presents the conclusions.

KEY FEATURES OF THE DHBW MODEL

DHBW offers 3-year Bachelor's degree programs in three different schools: School of Engineering, Business School, and the School of Social Work Studies. In recent years, it also offered Masters degree programs. However, as the Masters programs differ from the Bachelor programs and the experience is relatively new, this paper focuses on international relations in the field of the Bachelor degree

¹ Corresponding author: Axel Gerloff, gerloff@dhbw.de

programs. Enrolment has grown strongly over the past years with the student population reaching almost 33,000 students in the 2016–17 academic year (DHBW, 2017).

The key feature of the dual, practice-oriented degree program was the alternation of 3-month phases with students studying theoretical concepts at the university and receiving practical training from an enterprise or social institution. The students have an employment contract and throughout the entire period, they earn a monthly salary and have an insurance status of employees. The curricula combine practical training with more than 9,000 cooperating companies, with the university education aiming to provide both practice-oriented and academic-based theoretical knowledge. From an educational perspective, the study programs constitute an academic “learning by doing” approach. As already postulated by Dewey (1938), the model creates a learning environment in which the university is not an insular institution but becomes, together with the enterprise sector, an interactive field of learning and applying knowledge. Each semester has been divided into sections of academic training at the university and practical experience in a company. The students continuously reflect on their work experience and take that ‘know-how’ back to university. On the other hand, the academic knowledge can directly be applied at the workplace. Therefore, academic environment and work field are interwoven as in Kolb’s experiential learning cycle (Kolb, 1984). From an organizational and financial perspective, the study model can be viewed as a public-private partnership. The academic education is provided by DHBW, which is a public university. Baden-Wuerttemberg is a federal state within Germany that does not charge tuition fees to German and EU students but finances the education expenditure by tax revenue. Neither these students nor the companies have to pay for the university’s expenses. Only non-EU students are charged a tuition fee. However, the partnering companies and institutions pay the monthly remuneration to the students and incur the cost of training them during the practical training.

A major benefit for DHBW is the selection process of its dual partners in the enterprise sector. Students do not apply directly at the university but send their applications to the companies that conduct tests, interviews and assessment centers to recruit their students. After having selected the students, the companies sign contracts with the successful candidates and register them with DHBW. This process ensures that only highly motivated students are admitted. As a result very few students drop out of the 3-year study programs. This compares to the portion of U.S. students that do not to complete the 4-year degree within six years of 43% (The Economist, 2012).

Upon graduation, students are capable of meeting the demands of the enterprises immediately that is a major competitive advantage on the labor market. Approximately 85% of the students sign employment contracts with the companies after graduation (DHBW, 2018) which proves the employability of DHBW graduates as demanded by the Bologna Declaration (European Union, 1999). Since 1999, the three main objectives of the Bologna Declaration have been the introduction of a 3-cycle system of bachelor, master and doctorate degrees, as well as quality assurance and the recognition of qualifications and periods of studies among the signatory states. However, especially against the backdrop of the economic developments in Europe, the Bucharest Communiqué for the European Higher Education Area (EHEA, 2012) identifies the following three priorities: mobility, quality, and employability. The latter has gained utmost importance due to high youth unemployment (under the age of 25) in many European, especially Southern European countries. The unemployment rates exceed 30% in Spain and Italy, and has reached 40% in Greece (Eurostat, 2017).

Another important component of the DHBW model is its decentralized structure with overall 12 locations, that is, nine main campuses and three branch campuses. The existence of several campuses

throughout the federal state was intended to support the regional business sectors. Instead of concentrating academic education at universities in a few major urban areas or university cities, the state acknowledges the need for higher education at the provincial level to allow young people to study either close to their hometowns or close to their employers that are spread throughout the entire federal state. The decentralized structure of the enterprise sector is a special feature of the so-called *Mittelstand* (small and medium-sized enterprises) in the state of Baden-Wuerttemberg. Moreover, the decentralized organization leads to smaller campuses that fit well into the concept of teaching in small classes of only up to 30 students. The smaller class size allows close supervision by lecturers and student-centered study approaches that use, for example, presentations and teamwork activities (DHBW, 2018). Moreover, the close relationship of DHBW to the enterprise sector – the dual partners are actually part of the university system – is mutually beneficial for both parties. The university gets feedback on the study program's curricula and is able to make necessary adjustments. Adjunct faculty is often recruited from dual partners. This ensures up-to-date business experience in classrooms. In turn, the companies do not only benefit from lower cost of hiring young professionals through DHBW compared to other universities' graduates, they are also able to realize projects in cooperation with DHBW. For two case studies on Intel and SAP see Reinhard, Satow, and Sisco (2007) and Reinhard, Osburg, and Townsend (2008), respectively.

THE ROLE OF INTERNATIONALIZATION FOR THE SUCCESS OF THE DHBW MODEL

The employability of its graduates is a key factor for the success of the DHBW model of academic cooperative and work-integrated education. The willingness of companies to support students during a three-year Bachelor program crucially depends on an adequate return on this investment in human capital. The latter was given when students upon completion of their studies sign job contracts with their training companies and start their professional career there. If graduates lacked the skills required by their employers or if many qualified graduates left the companies, the corporate sector's interest in the DHBW model would diminish. The enterprises would search for alternative ways to recruit their staff. However, nowadays, employability often requires intercultural competence and international experience.

Until the late 1990s, many companies had a strong focus on domestic and local markets. Meanwhile, over the past two to three decades, sourcing and sales activities have become increasingly international. The globalization of business activities has led to changing needs of companies when hiring graduates. The majority of companies – not only large multinationals – have established new career models. While an essential part of an employee's job may still be dedicated to the domestic market, some tasks often cope with international business partners or even have to be performed abroad (Wittmann, 2012). Many studies have shown (Jones, 2012) that there is a good match of skills demanded by companies and skills that students develop through international mobility. Table 1 compares the two skills sets and shows the overlap.

Given the match of acquired skills and corporate sector requirements, most employers appreciate the international collaboration of DHBW with foreign universities and support international study experiences of their students during academic semesters. Moreover, many companies use the periods of practical training within the dual study model to allow students to gain international practical experience. While multinationals arrange placements for their students at a foreign subsidiary or branch office, smaller companies without foreign locations may use their international network of suppliers and clients to send students abroad. These developments show that internationalization has become an essential part of higher education to prepare students for an increasingly globalized world.

TABLE 1: Key skills comparison by employers and those developed through international mobility (Jones, 2012, p. 7).

Key skills required by employers	Key skills developed through international mobility
<ul style="list-style-type: none"> • Self-awareness • Initiative and enterprise • Willingness to learn • Planning and organizing • Integrity • Commitment/motivation • Problem-solving • Flexibility • Self-management • Teamwork • Communication skills • Foreign languages • Networking • Leadership • Customer service • Interpersonal skills • Intercultural skills 	<ul style="list-style-type: none"> • Self-awareness, self-confidence, sense of identity, and personal independence • Being informed, greater interest in global affairs and cross-cultural perspectives • Organizational skills, project management, decision-making, creativity and taking on responsibility • Vision, independence, experience, broader outlook and attitude • Problem-solving, coping strategies and risk-taking • Patience, flexibility, adaptability, open-mindedness and humanity • Teamwork and team leadership skills • Fluency, accuracy and appropriateness of language competence • Mediation skills, conflict resolution, sensitivity, humility and respect • Forging of relationships and networks • Challenge to personal stereotypes, cultural relativism • Enhanced intercultural communication, conducting business inter-culturally • Cultural empathy • Non-judgmental observation, respect for local values without abandoning one's own • Cultural understandings, ways of thinking and adaption to complex cultural environments

Hazelkorn (2012) points out that this was reflected by university rankings using internationalization as an important factor to compare academic institutions. Analyzing the challenges and options regarding internationalization at German universities, Bollig, Bölts, and Elger (2015) show that the QS-ranking and the THE-ranking use “international student ratio” and “international staff ratio” as indicators. Both ratios have a combined weight of 5% in the total QS-ranking. Including a third indicator on internationally co-authored publications, the variable “international outlook” has a weight of 7.5% in the THE-ranking. See Erkkilä (2014) and Kehm (2014) for the influence of global university rankings on higher education policies, national systems and higher education institutions in the European Union. Hochschulrektorenkonferenz (2011), that is the German Rectors’ Conference, expects the next student generation at German universities not only to be employable but to be equipped for global citizenship. In an increasingly interconnected and interdependent world, Rizvi (2009) argues learning itself has to become cosmopolitan. However, despite a consensus on the need of international education there seems to be less agreement regarding the best practice of internationalization. The next section examines a variety of approaches that can lead to mutually beneficial collaborations between DHBW and international partners.

OPPORTUNITIES OF INTERNATIONAL COLLABORATION

For a comparative study of internationalization strategies from a German perspective see Schreiterer and Witte (2001). In a more recent study, Powell, Graf, Fortwengel and Bernhard (2014) analyze the status quo and future perspectives of the internationalization of cooperative and work-integrated

German study programs. Their study examines two aspects: firstly, the degree of internationalization of German study programs with a focus on student mobility and, secondly, the opportunities of transferring the specific German cooperative and work-integrated model to other countries. These two aspects are also components of DHBW's internationalization strategy. Its motivation as a public, non-profit institution is clearly not financial. In this regard, DHBW differs from many private universities and other for-profit higher education providers whose key motive for internationalization is earning money (Altbach & Knight, 2007). Due to its close collaboration with industry, DHBW's main objective is to increase the corporate partners' global competitiveness through two pillars: intercultural competence of the graduates and creation of customized programs at DHBW or development of work-integrated study programs abroad.

Student and Faculty Exchange

This approach can be viewed as the "standard approach" of international collaboration. Pinheiro, Langa and Pausits (2015) stress a broadened role of universities in modern, knowledge-based societies. They must engage with various stakeholder groups and contribute to economic growth and social progress. Higher education institutions around the globe want their students to become capable of working in an international context and develop values of a "global citizen" (Lunn, 2008). For graduates to develop intercultural skills and to have a global mind-set as demanded by universities and employers alike (Lilley, Barker, & Harris, 2015), students need to spend time abroad by either studying or working in a foreign country. Therefore, all DHBW campuses look for opportunities to establish student and faculty exchanges with international partners. While some pay-for-study programs exist, most of these relations are based on reciprocity. While foreign students study one or two semesters at a DHBW campus, in turn, German students spend a term at the partner university. Exchange students will participate in English-spoken academic programs offered at DHBW campuses to avoid language barriers. Foreign and German students will benefit through enhanced academic experience and intercultural competence gained during their study abroad programs. Both parties will strive for a balanced approach in terms of student exchange numbers over the medium term and, therefore, tuition will be waived for international incoming students at the host institution. Each sending institution may charge applicable tuition and student fees to their outgoing students. To strengthen international ties, wherever possible, faculty members are encouraged to teach at the partner institution, too.

A major benefit of this approach was the experience that both parties usually possess with regard to the implementation of the exchange. Most university have established processes in place for student, faculty and staff exchanges. However, the success of a balanced student exchange rests on an equal number of students – if not annually, usually at least over a five-year period – willing to study at the other institution. Requiring German proficiency at an academic level may represent a prohibitive barrier for students from partner institution to study at DHBW. Even if courses are offered in English, which may constitute a challenge itself for the university, foreign students might prefer host institutions at which English is used in day-to-day conversations. Moreover, as long as the student exchange is limited to taking courses at the partner institution, that is, participating in the full-time academic semesters without any placement at corporate partners, DHBW is not positioning itself on the international market by stressing its unique feature of cooperative and work-integrated education. This has led to a second approach where the practical experience is the focus of the exchange program.

Study-Abroad Internship Tandems

DHBW's unique approach of dual education and its excellent relations to German companies offer the opportunity of a special student exchange. This model consists of an exchange of theoretical experience for DHBW students at a foreign partner university for a practical experience in a German company for foreign students. DHBW students spend an academic semester at the partner university and are put in touch with a student of the host institution who acts as a mentor during the study abroad experience. Upon completion of the term, the German and the foreign student return to Germany. The foreign student completes an internship at the same company that the German student works for. This model requires an international partner that provides academic credit for work experience. An example of this tandem approach is the so-called CANEU-COOP program that partners two Canadian universities, University of Victoria and University of Waterloo, and two European universities, DHBW in Germany and FH Joanneum in Austria (McRae, Ramji, Lu, & Lesperance, 2016). This combination of internationalization and work-integrated learning was presented by McRae and Ramji (2017, p.131) as a means to develop "postsecondary graduates who are capable of working effectively in culturally diverse workplaces". Tiessen, Grantham, and Cameron (2018) portray the benefits of participating in experiential learning programs. Among others, the skill development contributes to better career perspectives, the students' work experience increases confidence in their capabilities, and the workplace exposure has a great network potential. The CANEU-COOP program won an award for "Outstanding Program in International Education" by the British Columbia Council for International Education in 2016 (University of Victoria, 2016).

The model was likewise advantageous for students, employers, and universities. As the students already knew each other and had possibility of developing friendships during the time they spent together, the Canadian student had a mentor at the German enterprise who offers support and assistance during the stay. Through the twinning approach, both students gain invaluable practical, social and intercultural experiences that will boost their career perspectives. Another important feature of the model is the drastic reduction of required support by the host university's international office as well as the host company's personnel department. Naturally, participants in internship programs require a great deal of assistance as they are not familiar with legal, cultural, and social norms and regulations of the host country. Through the creation of the tandem, this support was outsourced to the tandem students who simultaneously acquire additional skills in advising their mate. Finally, from a university perspective, this program allows DHBW as well as its foreign partner institution to center the international relations on their core competence.

Short-Term Programs for Foreign Students or DHBW Students

The student exchanges proposed in the previous two subsections are no-fee/non-degree exchanges based on reciprocity. However, a recent trend in internationalization is the growing supply of and demand for shorter study abroad experiences. Faculty-led short-term programs, often lasting only one or two weeks, have become increasingly popular, especially at U.S. universities. While Ayoubi and Loutfi (2016) give an overview of studies on the impact of students' outward mobility, they do not distinguish between short-term and semester long experiences. Van der Wende (2001) contrasts an Anglo-Saxon with a continental European approach to internationalization. DHBW also offers short-term (summer) programs tailored to the needs of foreign students for which a certain charge applies. International partner universities can send student groups to a DHBW campus to study specific topics during a short-term intensive program. These courses can be designed for different academic subject (e.g., business and/or engineering) and can be offered at various levels (e.g., Bachelor or Master).

Moreover, these programs can include social and cultural activities as well as company visits and talks with representatives of German enterprises, due to the extensive enterprise network of DHBW. The timing as well as the exact contents and structure of such a program are determined in bilateral negotiations. The costs depend on the duration, scope of the program, and the range of services provided to the students.

A major advantage of short-term programs is the ability to make a special offer irrespective of a match of the study programs at host and home institution. In addition, DHBW has the opportunity to generate revenue from these programs that can be used to finance other internationalization efforts. However, a great downside of such programs is the weak or even missing contact between visiting students and regular students of the host university. Short-term programs are usually offered during break times making use of unused capacities regarding room and board as well as faculty to teach the visiting student cohort. The same reasoning applies in the opposite direction. However, short-term programs offered by partner universities for DHBW students can be a valuable alternative for students that are unable to realize a semester long study abroad or they supplement a successfully completed exchange semester, for example, by a short stay in another foreign country.

“Export” of the DHBW-Model

In Chapter 4 of their study, Powell, et al., (2014) discuss opportunities and limitations of German dual study programs that were transferred to five different countries: France, the United States, Brazil, Mexico and Qatar. However, caution must be exercised. A model that has proved to be successful in Germany cannot simply be “exported” to another nation. Notwithstanding this caveat, DHBW’s dual study model has attracted growing international interest in recent years. In particular, foreign subsidiaries of German multinational businesses would like to make use of similar models abroad. They know the system from home, and in the foreign country, they would also like to hire academically well-trained students who combine excellent theoretical knowledge with first experience in a business environment. By developing work-integrated study programs abroad, DHBW can support its corporate partners in the global environment, that is, the second pillar of its internationalization strategy. Therefore, DHBW is interested in cooperating with foreign universities to examine the potential of its model for the international market. Generally, four prerequisites need to be fulfilled in order for the transfer of the model to be successful: Firstly, the corporate sector must express the demand for cooperative and work-integrated education. Secondly, a local higher education institution has to be identified that is willing to and capable of offering practice-oriented study programs. The programs cannot be offered by DHBW itself, as it is a public institution with a legal mandate for educating students in Baden-Wuerttemberg for German companies – not foreign students abroad. Thirdly, closely linked to the aforementioned aspect, the national and local authorities need to support the project. This encompasses the legal framework that must allow for such an academic program. Lastly, DHBW as the fourth player can assist in designing, building and operating a work-integrated study program abroad. However, in line with its clear mandate for providing higher education in Baden-Wuerttemberg, DHBW is not conferring its degree. The students are enrolled in a national program and will receive the local university’s degree upon successful completion of the cooperative and work-integrated study program.

From a longer-term perspective, collaboration between DHBW and foreign universities offering similar study programs provide a great potential for an intensified international cooperation beyond the usual no-fee/non-degree student exchange. International students could study in Germany to experience the successful combination of theoretical and practical training and vice versa. Such a model would allow

both institutions to confer double or joint degrees. Multinational corporations would benefit from being able to have their students being trained in different countries and getting the degrees from two institutions. This reduces the uncertainty that results from the lack of acceptance of foreign degrees in some countries. While this strategy focuses especially on the core competence of cooperative and work-integrated education, such a relationship requires very close, resource intensive collaboration including the alignment of curricula.

CONCLUSION

DHBW's internationalization efforts are strongly influenced by two aspects. Firstly, the cooperation with partner companies requires DHBW to be present in markets where its firms are active. Secondly, its decentralized structure may hamper the implementation of a uniform strategy while simultaneously facilitating the on-the-spot support of student and faculty exchange. Just as other higher education institutions, DHBW collaborates with international partner universities based on agreements for student and faculty mobility. Regarding the length of students' study abroad experience, DHBW favors semester long programs over short-term programs. The latter do not allow students to develop the same intercultural skills and capabilities as full semester stays. For a university integrating academic studies and work experience in all study programs, the so-called "tandem approach" is a good way to highlight the unique selling position of DHBW. By coupling the theoretical with practical exchange terms, each side can offer what they can do best. Focusing on student mobility serves the first pillar of DHBW's internationalization strategy – the intercultural competence of its graduates. Their acquisition of employability skills benefits the corporate partners and increases their global competitiveness. Another way to support the enterprise sector is the "export" of the DHBW study model. This approach is demand driven because foreign subsidiaries of German companies would like to use the same successful practice-oriented study programs that they know from Baden-Wuerttemberg for training young professionals abroad. However, this can only function with a foreign partner university that offers a program that resembles DHBW's study programs and the domestic legal regulations limit the possible involvement of DHBW in developing programs abroad. While Reinhard (2006) argues that the cooperative and work-integrated education can be used by all cultures, it has to be kept in mind that DHBW's success is deeply rooted in Germany's traditional dual vocational education whose origin dates back to the medieval ages. Consistent internationalization must be based on a case-by-case decision regarding the collaboration with a specific partner or the approach that works best for the expansion into a foreign market.

ACKNOWLEDGEMENTS

An earlier version of the paper was presented at the 3rd International Research Symposium of World Association for Cooperative Education (WACE) in Stuttgart, Germany, in June 2018. The authors thank participants for helpful comments and suggestions.

REFERENCES

- Altbach, P. & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of Studies in International Education*, 11(3/4), 290-305.
- Ayoubi, R. & Loutfi, M. (2016). A comprehensive structure to understand outward mobility: Reflections for University International Offices. *Internationalisation of Higher Education*, 3, 79-95.
- Bollig, M., Bölts, S., & Elger, C. (2015). Challenges and options regarding internationalisation at German universities. *Internationalisation of Higher Education*, 2, 69-86.
- Dewey, J. (1938). *Experience and education*. New York, NY: MacMillan.
- DHBW. (2017). Jahresbericht der Dualen Hochschule Baden-Wuerttemberg 2016-17.

- DHBW. (2018). *Homepage of Duale Hochschule Baden-Wuerttemberg*. Retrieved from: <http://www.dhbw.de/die-dhbw/wir-ueber-uns.html>
- EHEA. (2012). Making the most of our potential: Consolidating the European Higher Education Area. *Bucharest Communiqué*. Retrieved from: http://www.ehea.info/media.ehea.info/file/2012_Bucharest/67/3/Bucharest_Communique_2012_610673.pdf
- Erkkilä, T. (2014). Global university rankings, transnational policy discourse and higher education in Europe. *European Journal of Education*, 49(1), 91-101.
- European Union. (1999). *Joint Declaration of the European Ministers of Education convened in Bologna on the 19th of June 1999*. Retrieved from: https://www.eurashe.eu/library/bologna_1999_bologna-declaration-pdf/
- Eurostat. (2017, October). Euro area unemployment at 8.8%. *News Release Euroindicators*, 182.
- Hazelkorn, E. (2012). Understanding rankings and the alternatives: Implications for higher education. In *Handbook Internationalisation of European Higher Education*, Section A 2.1-5, July, pp. 1-34.
- Hochschulrektorenkonferenz. (2011). Language policy at German universities. *Resolution of the 11th General Meeting of 22 November 2011*. Reprinted in Hochschulrektorenkonferenz (German Rectors' Conference) (Ed.), *Die deutschen Hochschulen internationalisieren!* (pp. 51-67). *Beiträge zur Hochschulpolitik*, 2/2012.
- Jones, E. (2012). Internationalisation and employability: Are we missing a trick? *Forum – Discussing International Education*, European Association for International Education, Winter, pp. 6-9.
- Kehm, B. (2014). Global university rankings – impacts and unintended side effects. *European Journal of Education*, 49(1), 102-112.
- Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Lilley, K., Barker, M., & Harris, N. (2015). Exploring the process of global citizen learning and the student mind-set. *Journal of Studies in International Education*, 19(3), 225-245.
- Lunn, J. (2008). Global perspectives in higher education: Taking the agenda forward in the United Kingdom. *Journal of Studies in International Education*, 12(3), 231-254.
- McRae, N. & Ramji, K. (2017). Intercultural competency development curriculum: A strategy for internationalizing work-integrated learning for the 21st century global village. In T. Bowen, M. T. B. Drysdale (Eds.), *Work-Integrated Learning in the 21st Century (International Perspectives on Education and Society, Volume 32)*. (pp.129 – 143). Bingley, UK: Emerald.
- McRae, N., Ramji, K., Lu, L., & Lesperance, M. (2016). Developing global-ready graduates: The CANEU-COOP experience. *Asia-Pacific Journal of Cooperative Education, Special Issue*, 17(4), 377-386.
- Pinheiro, R., Langa, P., & Pausits, A. (2015). One and two equals three? The third mission of higher education institutions. *European Journal of Higher Education*, 5(3), 233-249.
- Powell, L., Graf, L., Fortwengel, J., & Bernhard, N. (2014). Dual study programmes in global context: Internationalisation in Germany and transfer to Brazil, France, Qatar, Mexico, and the US. *Documents & Materials*. Band 77. Ed. by Deutscher Akademischer Austauschdienst (DAAD) and Stifterverband für die Deutsche Wissenschaft. Siegburg: ditges print+more gmbh.
- Reinhard, K. (2006). The German Berufsakademie work-integrated learning program: A potential higher education model for west and east. *Asia-Pacific Journal of Cooperative Education*, 7(1), 16-21.
- Reinhard, K., Osburg, T., & Townsend, R. (2008). The sponsoring by industry of universities of cooperative education: A case study in Germany. *Asia-Pacific Journal of Cooperative Education*, 9(1), 1-13.
- Reinhard, K., Satow, L., & Sisco, L. (2007). Internationalization cooperative education: An introduction to the Berufsakademie Ravensburg's work-integrated cooperative education partnership with the multinational corporation SAP Incorporation. *Asia-Pacific Journal of Cooperative Education*, 8(2), 109-119.
- Rizvi, F. (2009). Towards cosmopolitan learning. *Discourse: Studies in the Cultural Politics of Education*, 30(3), 253-268.
- Schreiterer, U. & Witte, J. (2001). Modelle und Szenarien für den Export deutscher Studienangebote ins Ausland – Eine international-vergleichende Studie im Auftrag des DAAD. Ed. by Centrum für Hochschulentwicklung (CHE) & Deutscher Akademischer Auslandsdienst (DAAD). Rietberg: Druck und Beschriftung Setter.
- The Economist. (2012, Dec 1). Higher education: Not what it used to be. *The Economist*, pp., 49-50.
- Tiessen, R., Grantham, K., & Cameron, J. (2018). The relationship between experiential learning and career outcomes for alumni of international development studies programs in Canada. *Canadian Journal of Higher Education*, 48(3), 23-42.
- University of Victoria. (2016, July 11). Award-winning CANEU CO-OP program helps students become global-ready graduates. *UVic news*. Retrieved from <https://www.uvic.ca/news/topics/2016+caneu-coop-program-global-ready+ring>
- Van der Wende, M. (2001). Internationalisation policies: About new trends and contrasting paradigms. *Higher Education Policy*, 14(3), 249-259.
- Wittmann, F. (2012). International skills for professional success. In *Handbook of Internationalisation of European Higher Education*, Section E 1.6, pp. 1-20.

This IJWIL Special Issue was sponsored by



**Papers stem from presentations¹
delivered at the 3rd International
Research Symposium on Cooperative
and Work-Integrated Education**

¹ Papers included in this IJWIL Special Issue are based on selected presentations and manuscripts from the research symposium's refereed proceedings. All manuscripts were expanded and modified to meet IJWIL requirements followed by double-blind reviewed by the IJWIL editorial board, and then amended before being accepted to be published in IJWIL.



About the Journal

The International Journal of Work-Integrated Learning (IJWIL) publishes double-blind peer-reviewed original research and topical issues dealing with Work-Integrated Learning (WIL). IJWIL first published in 2000 under the name of Asia-Pacific Journal of Cooperative Education (APJCE). Since then the readership and authorship has become more international and terminology usage in the literature has favored the broader term of WIL. In response to these changes, the journal name was changed to the International Journal of Work-Integrated Learning in 2018.

In this Journal, WIL is defined as "*an educational approach that uses relevant work-based experiences to allow students to integrate theory with the meaningful practice of work as an intentional component of the curriculum*". Examples of such practice includes work placements, work-terms, internships, practicum, cooperative education (Co-op), fieldwork, work-related projects/competitions, service learning, entrepreneurships, student-led enterprise, applied projects, simulations (including virtual WIL), etc. WIL shares similar aims and underpinning theories of learning as the fields of experiential learning, work-based learning, and vocational education and training, however, each of these fields are seen as separate fields.

The Journal's main aim is to enable specialists working in WIL to disseminate research findings and share knowledge to the benefit of institutions, students, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that leads to the advancement of effective practices, development of further understanding of WIL, and promote further research.

Types of Manuscripts Sought by the Journal

Types of manuscripts sought by IJWIL is primarily of two forms; 1) *research publications* describing research into aspects of work-integrated learning and, 2) *topical discussion* articles that review relevant literature and provide critical explorative discussion around a topical issue. The journal will, on occasions, consider best practice submissions.

Research publications should contain; an introduction that describes relevant literature and sets the context of the inquiry. A detailed description and justification for the methodology employed. A description of the research findings - tabulated as appropriate, a discussion of the importance of the findings including their significance to current established literature, implications for practitioners and researchers, whilst remaining mindful of the limitations of the data. And a conclusion preferably including suggestions for further research.

Topical discussion articles should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical and scholarly discussion on the importance of the issues, critical insights to how to advance the issue further, and implications for other researchers and practitioners.

Best practice and program description papers. On occasions, the Journal also seeks manuscripts describing a practice of WIL as an example of best practice, however, only if it presents a particularly unique or innovative practice or is situated in an unusual context. There must be a clear contribution of new knowledge to the established literature. Manuscripts describing what is essentially 'typical', 'common' or 'known' practices will be encouraged to rewrite the focus of the manuscript to a significant educational issue or will be encouraged to publish their work via another avenue that seeks such content.

By negotiation with the Editor-in-Chief, the Journal also accepts a small number of *Book Reviews* of relevant and recently published books.



EDITORIAL BOARD

Editor-in-Chief

Dr. Karsten Zegwaard University of Waikato, New Zealand

Associate Editors

Mrs. Judene Pretti University of Waterloo, Canada
Dr. Anna Rowe University of New South Wales, Australia

Senior Editorial Board Members

Prof. Richard K. Coll University of the South Pacific, Fiji
Prof. Janice Orrell Flinders University, Australia
Prof. Neil I. Ward University of Surrey, United Kingdom
Dr. Phil Gardner Michigan State University, United States
Dr. Denise Jackson Edith Cowan University, Australia

Copy Editor

Yvonne Milbank International Journal of Work-Integrated Learning

Editorial Board Members

Assoc. Prof. Erik Alanson University of Cincinnati, United States
Mr. Matthew Campbell Queensland University of Technology, Australia
Dr. Craig Cameron Griffith University, Australia
Prof. Cheryl Cates University of Cincinnati, USA
Dr. Sarojni Choy Griffith University, Australia
Dr. Bonnie Dean University of Wollongong, Australia
Prof. Leigh Deves Charles Darwin University, Australia
Dr. Maureen Drysdale University of Waterloo, Canada
Dr. Chris Eames University of Waikato, New Zealand
Mrs. Sonia Ferns Curtin University, Australia
Dr. Jenny Fleming Auckland University of Technology, New Zealand
Dr. Thomas Groenewald University of South Africa, South Africa
Dr. Kathryn Hays Massey University, New Zealand
Prof. Joy Higgs Charles Sturt University, Australia
Ms. Katharine Hoskyn Auckland University of Technology, New Zealand
Dr. Sharleen Howison Otago Polytechnic, New Zealand
Dr. Nancy Johnston Simon Fraser University, Canada
Dr. Mark Lay University of Waikato, New Zealand
Prof. Andy Martin Massey University, New Zealand
Ms. Susan McCurdy University of Waikato, New Zealand
Dr. Norah McRae University of Victoria, Canada
Dr. Keri Moore Southern Cross University, Australia
Prof. Beverly Oliver Deakin University, Australia
Dr. Laura Rook University of Wollongong, Australia
Assoc. Prof. Philip Rose Hannam University, South Korea
Dr. David Skelton Eastern Institute of Technology, New Zealand
Prof. Heather Smigiel Flinders University, Australia
Dr. Calvin Smith Brisbane Workplace Mediations, Australia
Dr. Raymond Smith Griffith University, Australia
Assoc. Prof. Judith Smith Queensland University of Technology, Australia
Prof. Yasushi Tanaka Kyoto Sangyo University, Japan
Prof. Neil Taylor University of New England, Australia
Assoc. Prof. Franziska Trede Charles Sturt University, Australia
Ms. Genevieve Watson Elysium Associates Pty, Australia
Dr. Nick Wempe Primary Industry Training Organization, New Zealand
Dr. Marius L. Wessels Tshwane University of Technology, South Africa
Dr. Theresa Winchester-Seeto University of New South Wales, Australia