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Author(s): Saleem, Salman; Akpinar, Murat

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Introducing the research-based teaching method in the international business bachelor's degree program

Salman Saleem [1] and Murat Akpinar [2]

[1]*Salman Saleem, JAMK University of Applied Sciences, Finland, salman.saleem@jamk.fi*

[2] *Murat Akpinar, JAMK University of Applied Sciences, Finland murat.akpinar@jamk.fi*

Abstract

Research is an integral part of higher education, specifically international business (IB) higher education. This paper has highlighted the significance of research for higher education from a variety of perspectives, namely, recognition bodies, policymakers, industry and society in general. Thus, there is an increasing pressure on teachers at higher education institutions to increase the research output. This paper provides first a brief overview of learning approaches and methods and coins the research-based teaching method. Then it describes the implementation of research-based teaching model at JAMK School of Business. Our findings show that research-based teaching method proves to be beneficial for all stakeholders, as it results in high-quality theses, award-winning conference papers and journal publications. Based on obtained results, authors recommend academicians, scholars and policymakers to promote research-based teaching method. Lastly, the authors discuss the limitations and call for further research to improve the research-based teaching method.

Keywords: *International Business (IB), Higher education, Research-based teaching, JAMK University of Applied Sciences*.

1. Introduction

History of humanity shows that research has developed and evolved the knowledge in all fields of life from artistic disciplines, such as dance and music, to rocket science of reaching Mars. It is safe to say that research is the mother of all knowledge acquired by a human being. The significance of research is unquestionable regardless of vocation, trade and education domain. Given the significance of research, policymakers have set the policies to promote research in every institution. Specifically, research is an integral component of degree awarding institutions (DAI) across the globe. Research output is one of the key performance indicators of higher education institutions. There are several organizations, which rank higher education institutions across the world. The most well-known ranking systems include the QS World University Rankings, Times Higher Education World University Rankings, and the Academic Ranking of World Universities (ARWU) [1]. Almost all ranking systems put greater weight on research activities of higher education institutions. For instance, 'The Times Higher Education World University Rankings' has set a massive 60% weight (research 30% and research citations 30%) on research activity [2]. It is not a secret that the higher the university ranking the higher the probability of attracting talented students, faculty members and researchers. Similarly, the accreditation of higher education by third parties is an essential tool for developing competitive advantage. Certification helps higher education institutions to improve their process and quality of education, thus to attract good students. Also, a degree from accredited schools helps the student to get better employment opportunities. Employers can easily recognize student competence based on their educational institution and accreditations. For example, there are several accreditations for a business school such as Association to Advance Collegiate Schools of Business (AACSB), International Accreditation Council for Business Education (IACBE), and European Foundation for Management Development (EFMD), to mention a few [3]. Like university ranking organizations, accreditation organizations of business schools also emphasize the research activity as one of the key performance indicators in their assessment.

Policymakers across the globe genuinely understand the significance of ranking and accreditations of higher education institutions in the economic and social prominence of their education system in the local and global

context. In Europe, research is at the forefront of educational institutions. In Finland, the Ministry of Education and Culture regulates higher education, and it has included research activity of higher educational institutions as a vital component for securing finances [4]. As a result, faculty members of academic and applied science universities are under increasing pressure to maintain the research output beside their teaching and other administrative tasks. Similarly, research is one of the critical components for degree programs in higher education institutions. For instance, a thesis is compulsory to obtain bachelor's and master's degree in Europe and other advanced countries [4]. To sum all, research is a necessary component for all stakeholders in the higher education system and the engine of new knowledge, which in turn contributes to the social and economic wellbeing of societies and humanity. As such, the core question is "*how to enhance student learning and increase research outputs by integrating research into the curriculum*".

This paper addresses this question by proposing an innovative pedagogical approach that incorporates research into learning in a way that benefits all stakeholders. As discussed earlier, research is equally crucial for education policymakers, educational institutions, teachers, students and society. The authors argue that incorporating research in learning creates win-win solutions for all stakeholders mentioned above. It helps teachers to produce research to meet the demands of new knowledge creation and enhance the institutional and national research output. The generated knowledge could be a vital source for teaching and learning in forthcoming years. In doing so, teachers also meet the demands of policymakers and the society. Students are indeed an essential resource for teachers, and through research-based learning, both students and teachers win as students acquire the learning and teachers maintain the research output. The article is organized so that we first review several learning theories and their connection with research to develop the argument about research-based learning. Then we explain how research-based learning has been practiced at the IB bachelor degree program. In the last section, the study will provide conclusions on the findings and outline potential avenues for adopting research-based learning as a pedagogical approach.

2. Literature review

2.1. Learning theories

According to the Oxford dictionary, the word learning refers to 'the acquisition of knowledge or skills through study, experience, or being taught' [6]. The psychology discipline views learning as 'the alteration of behaviour as a result of individual experience: when an organism can perceive and change its behaviour, it is said to learn' [7]. Scholars from several domains of knowledge acknowledge the importance of learning but differ in their view concerning the reasons, procedures and outcome of education [8]. Most of the learning theories originate from psychology researchers. However, scholars also have a strong belief that learning is not a science like psychology; instead, it is an art. For instance, Highet in 1950 has remarked that learning is an art, and as such applying scientific methods to human beings is dangerous [9]. In the same vein, Gage has used technique as a metaphor for teaching and learning [10]. More recently, researchers and academicians have started to emphasize that the learning environment should comprise the cognitive aspect that helps the learners to develop their skills [11]. In other words, student learning has received increasing attention, and researchers seem to be more interested in the teaching patterns rather than teaching behaviour [12]. The purpose of this paper is not to review and comment on various schools of thoughts concerning learning. Keeping parsimony in view, we will briefly introduce some selected learning theories and develop the rationale for our research-based teaching pedagogical approach.

John Dewey, an influential educational reformist, introduced the instrumentalist or pragmatic theory of learning [13]. In his theory, Dewey emphasized that learning occurs when the learner has an active engagement with the environment. His ideas gained increasing popularity among scholars and academicians and led to the development of several learning approaches, namely experiential learning, problem-based learning, and inquiry-based learning, to mention a few [13]. Dewey and other scholars of the above-mentioned school of thought have further emphasized that the traditional strict classroom environment is the crucial obstacle for delivering progressive education [14]. Progressive education system enables the learner to learn by engaging in the learning experience, to develop problem-solving skills, to apply acquired knowledge to actual problems, to build close connections with vocation and life-long learning, and to take responsibility and think of their responsibilities. In a nutshell, Dewey and his followers have emphasized that learners should be provided with an opportunity of learning by experiencing and doing things.

According to George Siemens, learning theories such as behaviourism, cognitivism, and constructivism did not explain how learning is impacted by technology. In response, he introduced a new approach to learning called connectivism. According to Siemens's connectivism theory, "knowledge is distributed across a network of connections, and therefore, learning consists of the ability to construct and traverse those networks" [16]. Connectivism learning theory explains how communication technologies in the digital age have created learning opportunities. For example, emails, social media, the worldwide web, YouTube, online forums enable learners and teachers to learn and share information through networks. Students should be encouraged to move beyond the boundaries of the classroom and explore a range of digital tools to support their independent learning [17].

The authors argue that the proposed research-based teaching pedagogical approach has close connections with for example the inquiry-based learning, where the student would be learning new knowledge by engaging in research activity. It also receives support from the connectivism theory in that research in today's world is more and more enabled and conducted using technological means.

2.2. Teaching methods and learning outcomes

In general, teaching methods can be categorized into five broader categories [18].

1) *Information transmission or traditional lecturing*. In this method, the teacher explains or demonstrates the subject through videos, diagrams, or pictures. The implementation of this method requires the active participation of students and plenty of hours of independent work after the class. The critical weaknesses of this method are that low participation leads to weak learning outcomes, usually blamed for superficial learning and heavy work burden on the student [19].

2) *Activity-based teaching*. This method involves active student participation in contact teaching sessions. Using this method, the student is engaged in activities in learning by acting, performing, demonstration, thinking, writing, reading, reasoning, questioning, answering, and operating something. At the core, the method aims to make a student learn by doing something. Popular methods of activity-based teaching are dramatization, quizzes, role-plays, educational games, and group discussions, to mention a few. The implementation of this method requires very open and extrovert students. Therefore, shy students might feel pressured. Furthermore, this learning method may not suit all fields of study, and it requires a lot of planning and resources.

3) *Assignment-based teaching*. Using this method, the teacher assigns students to work independently outside the class. Therefore, the effective implementation of this method requires student self-regulation and commitment to work independently according to given instructions [20]. The learning outcomes are based on students' written work, the creation of some artefacts (e.g., software, a piece of art), and live presentations of work or performances of the actual process in the laboratory [21]. The effective implementation of this method calls for prior knowledge of learning about the subject matter.

4) *Literature-based teaching*. This method requires the student to read the content of course independently or according to given instructions. This method can be used together with additional tasks for contact teaching. Learning outcomes can be determined by comprehension of the assignment content in learning diaries, review of assigned books or literature [22]. However, this method can be used stand-alone only for expert level students, and it requires self-discipline from the student's side.

5) *Virtual teaching*. Virtual teaching method is used to substitute face-to-face contact teaching. The implementation of this method requires appropriate equipment and orientation of technology [23]. A fundamental disadvantage of this method is a loss of time caused by technical error functions and unstable software operation. On the other hand, it allows more flexibility and independence for students but at the same time requires self-discipline.

In a nutshell, no method is superior to others in the implementation of learning. However, the usefulness of a particular method may depend upon the characteristics of the learner and the subject in focus. For instance, students may differ in their personal and social skills. The effective implementation requires that teacher promotes individual student learning by personalizing the learning plans. In the classroom setting, the teacher may expect to face students with different levels of competences and abilities. Thus personalizing the implementation of teaching may help the teacher to produce desired outcomes at individual level. Authors argue that research-based teaching method is the best way to personalize learning for the individual student. Authors further argue that research-based teaching would help the teacher to achieve high-quality learning outcomes by

boosting student confidence and promoting self-accountability, and by enabling the student to understand actual international business issues both theoretically and practically. Research-based teaching can also aid the teacher to address the need for research for companies, the teaching institution's demand for improving research output, and the development of the student's competence in research. Below we will present the findings of results of research-based teaching in the IB program at JAMK School of Business.

3. Results

The research-based curriculum was launched in the International Business (IB) bachelor's degree programme at JAMK University of Applied Sciences in Finland for the first time during the 2016-2017 academic year, and to date it has been implemented with adaptations for three cohorts. In this new curriculum, following the first year, which consists of fundamentals of business courses, the second year is the academic research year. The aim of this year is to divide the students into smaller groups, whereby they will have the possibility to work closely with the faculty in academic research projects, and finally conduct their bachelor thesis either individually or in pairs. As going for exchange is compulsory during the third year of the IB bachelor's degree programme, moving the thesis from the end of the studies to the second year has improved the quality of the thesis supervision process and the quality of the theses significantly. This finding is confirmed based on feedback from students and the faculty alike. Feedback suggests that the research-based curriculum has cultivated the students' academic literacy and research skills rigorously by integrating them into research projects with the faculty. Some of the good-performing students have even found the opportunity to co-publish with the faculty, which offered them advantages in getting access to their desired master's degree programmes. For example, a joint conference paper based on the thesis of an IB student won the best-paper award at the world congress of the International Management Development Association in Nicosia, Cyprus in June 2019. Thanks to the new curriculum, faculty of the academic tracks also had the privilege to focus and leverage student resources in advancing research in their areas of expertise. This also allowed them to better optimize links between teaching and research, enhancing their intellectual contributions to teaching. For example, two cases were written in the economics of internationalization and competitiveness track during the 2017-2018 academic year (one about the competitiveness of Taiwan, and the other about the competitiveness of Turkey and Turkish Airlines). These cases were published at Finnish Business Review, JAMK's scholarly publication, and they were used as teaching material in the same track during the 2018-2019 academic year. Overall, it is possible to argue that the new curriculum created a win-win situation for both students and the faculty.

There are six academic tracks in the new curriculum, and IB students need to select two of them during the spring semester of their first year. The tracks, which are 7 ECTS each, are cross-cultural management, marketing management, technology business and future foresight, user-centric innovations, finance and corporate governance, and economics of internationalization and competitiveness. The tracks aim to review the most relevant literatures in their areas, and each track is extended by a 5 ECTS research project, whereby students conduct an empirical study to solve a managerial problem by applying a relevant theoretical framework from their literature review. As a result, students complete total 24 ECTS during the autumn semester by participating in two tracks (14 ECTS in total) and their corresponding two research projects (10 ECTS in total). Students develop their literature review skills during the academic tracks and their methodological skills regarding data collection and data analysis during the projects. These exercises help them prepare for their next challenge, the thesis. Towards the middle of the autumn semester, students need to decide in which of their two tracks they will continue to do their theses. At the same time, they start with the bachelor theses part 1 course, where they further develop their academic writing skills and make the research plans for their theses. Wise students will do the final literature review assignment of one of their tracks to be the preliminary literature review chapter of their theses and save time and efforts. Finally, the empirical study and the finalization of the thesis will realize during the spring semester.

The progress of the students is being monitored rigorously during the academic tracks and their projects using the intended learning outcomes (ILOs) as the evaluation criteria. The two ILOs to assess the academic track are knowledge and understanding 1 (KU1) and intellectual skills 2 (IS2), and the two ILOs to assess the project are intellectual skills 1 (IS1) and IS2. KU1 evaluates that the student is able to employ theoretical and conceptual knowledge to identify and analyze problems. IS1 assesses that the student is able to gather, analyze and evaluate data and information, and transform empirical data into useful and actionable information. Finally, IS2 tests that the student is able to interpret and analyze complex issues from multiple perspectives and critically review

academic literature and other relevant information sources. Students make a preliminary self-assessment of their skills in KU1, IS1 and IS2 and identify their target achievement levels at the beginning of the autumn semester. They also make a self-assessment of their achieved levels at the end of the autumn semester. These statistics are then compared with the assessments by the faculty in the literature review and project assignments. This evaluation system ensures that students develop their skills consciously and checks that the faculty's assessments are valid and reliable. Comparisons of students' self-assessment with faculty's assessment show that there are no significant deviations on average (see Table 1 for an example analysis from the economics of internationalization and competitiveness track). However, there are very rarely deviations on an individual basis, and it is an area for improvement to discuss about the reasons of such deviations between the faculty and related students. Note that the grading system at JAMK is from 0 to 5, whereby 0 means fail, 1 is sufficient, 2 is satisfactory, 3 is good, 4 is very good, and 5 is excellent.

Table 1. Comparative evaluation of ILO averages in the economics of internationalization and competitiveness track in 2018-2019

ILO	KU1	IS1	IS2
Pre-course level (self-evaluation)	2.47	2.47	2.24
Target level (self-evaluation)	4.12	4.06	4.06
Achieved level (self-evaluation)	4.21	4.14	4.07
Grade from track (faculty evaluation)	3.89		3.89
Grade from project (faculty evaluation)		4.15	4.15

The above-described two-track system was run for three consecutive academic years starting from 2016-2017 until the end of 2018-2019. Results showed that the new system improved students' performances in the theses and contributed to their faster graduation. However, feedback from the faculty revealed a deficiency: once students knew which track, they would continue in their theses, they were not anymore committed to perform equally well in their second track. Lack of commitment from students also affected the attitude of faculty negatively. Taking this into consideration the system was adopted to become one-track only starting as of the academic year 2020-2021. The academic year 2019-2020 will be a transition year such that students will be able to choose a single track or two tracks. Having fully committed students is expected to further improve the efficiency of the system. Attending a single academic track will also offer more flexibility for faculty to arrange their classroom activities and research projects, as there will not be worries overlapping sessions of different tracks. However, there are question marks whether students will be able to make the right choices for their tracks at the end of their first year. It is also yet uncertain what will happen with students who realize in the middle of the autumn semester that they would like to change their track.

4. Conclusion

Research is an integral part of the higher education system across the globe. The article attempts to present the significance of research in teaching, specifically in the context of IB higher education. The paper demonstrates that research is an essential element and critical indicator of quality for IB higher education. The research output of higher education institutions is recognized as one of the key performance indicators by all higher education institution ranking bodies. Also, research is considered necessary regardless of institution and organization type. Specifically, companies in their endeavor to internationalize require research-based analysis of the international marketplace. Given above academicians in IB programs are in an increasing pressure to develop research skills of their students and meet the expectation of their respective educational institution, industry and society in general. Authors have reviewed some learning theories and learning methods, and while emphasizing the limitations of existing approaches, they introduce the research-based teaching method in the context of IB higher education. Authors have described the implementation of research-based teaching model at JAMK School of Business. The research-based teaching method has proved to be very useful, resulting in high quality theses, conference papers, and journal publications. The following steps are recommended for the successful implementation of the model:

1. Name the second or the third year as the "academic" year.

2. Identify the core fields of research for the program based on the expertise and interests of the faculty.

3. Establish the academic tracks for the program in line with the identified core fields of research.

4. Introduce the academic tracks to the students and let them choose their tracks during the spring semester of the previous year.

5. Run the academic tracks and their related projects in the autumn semester.

6. Let the students choose their thesis topics from their academic tracks and do their theses during the spring semester of the academic year.

7. Faculty shall select quality works from the academic tracks, projects, and theses, and further work with the students to develop them into publications.

8. Faculty shall use the publications as teaching material in their tracks in the next years.

Moreover, students were able to develop high-quality research for companies as well. Given encouraging results, the authors recommend IB teachers and scholars to adopt the research-based teaching method. Also scholars and academicians from other disciplines may study and implement this approach for high-quality learning outcomes. The authors urge scholars and academicians to investigate more approaches to implement research-based teaching. There is a famous saying that 'all the glitter is not gold'. The authors have also experienced several issues in the implementation of the research-based teaching method, such as lack of time resources, lack of student's interest in research, and lack of student's competences in reading the literature and writing research. In response, JAMK Business School has decided to organize a research week at the beginning of their studies. We hope that familiarizing students with research during the research week right at the beginning of their studies will help us draw their attention and influence their attitude towards the research-based teaching method.

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