

Students as Knowledge Mediators in Transnational Higher Education

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ABSTRACT

This study aims to gain a deeper understanding of knowledge transfer as an outcome of transnational education. Based on the case of a Finnish–Vietnamese transnational education program, this paper analyzes the role of students as knowledge mediators between the study program, students’ personal development and work life. Although students should play a critical part in learning and transferring knowledge between study and work life in theory, it seems that in practice, their role might be rather limited and passive. While multiple external factors affect learning and knowledge transfer, students’ prior knowledge, skills and experience were found to be more significant factors, which teachers and program designers should carefully consider while promoting stronger participation. This paper contributes to the discussion on transnational higher education by elaborating students’ changing role as knowledge transferors and transferees and by bringing the students’ voice to the debate on the outcomes and impacts of transnational higher education.

Keywords: transnational education; knowledge transfer; transfer of learning; work life

Transnational education (TNE) programs are those in which learners are located in a country other than the one in which the awarding institution is based (e.g., McBurnie & Ziguras, 2011). The number of TNE programs has increased significantly over the last two decades (ibid.), which implies this form of higher education has achieved certain success in terms of scale. The focus of this study is the emerging markets in the East – where several Western educational programs have been exported to, for example, Hongkong, China, Malaysia, Indonesia and Vietnam (Banner, 2016; Knight, 2016; Kosmutzky & Putty, 2016). Various stakeholders have different motivations and interests in participating in TNE (Altbach & Knight, 2007; Lönnqvist et al., 2018). However, at the heart of higher education, the ultimate goal is that students acquire new knowledge and skills benefitting them personally and professionally and, at large, that is advantageous to society (Altbach, 1998; Bransford & Schwartz, 1999). Whether and how this goal is achieved through TNE and what impacts TNE has on the development of the receiving countries is still not evident. In this article, the impacts of transnational higher education are studied from the viewpoint of students.

Ideally, it is assumed that in TNE, knowledge is transferred across countries and cultures via academic mobility and modern information and communication technology (ICT) (Waters & Leung, 2017). However, research on knowledge transfer recognizes various factors constraining the transfer process. For example, the locally sticky characteristic of knowledge makes it difficult to transfer knowledge across cultures (Albino et al., 1998; Oddou et al., 2009; Polanyi, 1966; Szulanski, 1996). Moreover, different cultural and institutional contexts add to the complexity of knowledge transfer in TNE programs, and students as knowledge mediators are at the center of this complexity. To gain more understanding of the knowledge transfer in TNE and the outcomes of TNE programs from the students' viewpoint, this article aims to answer the following research questions: 1) How do students perceive the outcomes of a TNE program? 2) What determinants affect the transfer from the students' viewpoint? and 3) How can students use the acquired knowledge in their work life?

The remainder of the article is organized as follows. Section 2 includes the definition of the key concepts of knowledge transfer and learning in the context of transnational higher education. Section 3 describes our research design, and section 4 introduces the key findings from our interview data. Finally, section 5 concludes the discussion.

Knowledge transfer and learning in transnational higher education

Knowledge transfer and learning

Over the last few decades, several empirical studies on learning and knowledge transfer in the context of TNE and training have been performed (Barnett & Ceci, 2002; Cannon, 2001; D'Annunzio-Green & Barron, 2019;

Hoare, 2012; Kanu, 2005; Napier, 2005; O'Donoghue, 1994; Pimpa, 2009; Sutrisno & Pillay, 2015). It has been established that knowledge transfer takes place when knowledge and skills add values that improve job performance (Broucker, 2010) or otherwise affect the behavior of the recipient (Argote & Ingram, 2000; Marton, 2006, as cited in Lobato, 2006). Similarly, the transfer of learning happens when learning is transferred from one context to another (Leberman et al., 2006). 'Added value' can refer to 'concrete actions', 'cognitive reflection necessary to the performance' (Broucker, 2010, 237) or the way 'new knowledge and skills are learnt and performed' (Leberman et al., 2006, 2). Accordingly, this definition enables a broad spectrum of transfer outcomes at different levels and of various types. Nevertheless, it does not help in figuring out how to enhance knowledge transfer, as it only considers whether transfer happens and what impacts it has.

Contrary to defining transfer as 'replicating', 'carrying over' or 'extending' knowledge from one context to another (Szulanski, 1996), transfer can be depicted as a process involving different actors and actions (Szulanski, 2000). Thus, instead of simplifying transfer, Napier et al. (2008) described transfer as a process with different starts and stops and with knowledge jamming between both sides of transfer over a long-term period. Moreover, according to Volet (1999), transfer cannot be detached from the learners' emotions, beliefs and attitudes, which are requisites to make sense of the new learning.

Accordingly, transfer and learning can be understood as intertwined. When utilizing the learnt knowledge in a new context, one must reflect, seek for the relevance of the knowledge to specific context and interpret knowledge accordingly. Bormann (2007) called this process 'interpretative adaptation', in which knowledge is not just simply reproduced but also actively adapted and embedded into individual and local knowledge systems. Kilbrink et al. (2018) defined learning as a complex 'interplay' between previous experience, previous learning and new experience and new learning. While learners and their ability to learn play a key role in knowledge transfer, teachers are needed in providing learning assistance to make transfer happen (Tennant, 2000).

To move the conceptual discussion forward, knowledge transfer could also be approached from a learning perspective. Accordingly, Bransford and Schwartz (1999, 84) discussed transfer as 'preparation for future learning'. They shifted the traditional way of assessing knowledge transfer based on whether people can apply knowledge in new settings to assessing people's ability to learn in new situations. This forward-looking approach enables the identification of outcomes of knowledge transfer in education, as it is not strictly about what people have learnt and how they apply new knowledge. Even though this approach focuses on internal learning while excluding the knowledge transfer between different actors

(e.g., between teachers and students or between graduates and colleagues at work), it provides a noteworthy view, adopted in this study, that to foster knowledge transfer, it is important to understand how people learn.

Factors affecting knowledge transfer in TNE

Given that transfer happens in both learning and work contexts, students can be depicted as both the recipient and the source of knowledge. Thus, students' *motivation* to learn and transfer knowledge as well as their actions and emotions while studying and at work affect the success of the transfer. Many studies on TNE students' motivation to learn show students' motivation is mainly affected by external factors, rather than self-driven factors (Brewer, 2008; Leung & Waters, 2013; Testers et al., 2015). For instance, motivation is affected by opportunities to be promoted, length of a program and the perception of teachers or influence from other students. Moreover, Brewer (2008, 141) discovered an 'anomaly of knowledge transfer' in multicultural contexts where students' willingness to receive knowledge has increased due to their 'favor' of Western teachers. Furthermore, networking as an outcome of a study program has been found to be motivating for students (D'Annunzio-Green & Barron, 2019). Indeed, being part of a learning group can create a sense of belonging, encourage learning and knowledge transfer within and outside a group (Bransford et al., 2000; D'Annunzio-Green & Barron, 2019).

In addition to motivation, students' *background* plays an important role in knowledge transfer – as it defines students' ability to understand, value and use the acquired knowledge (Albino et al., 1998; Napier, 2005). Prior knowledge and skills can either facilitate or impede learning. For instance, inadequate English skills and a lack of essential academic skills prior to entering study programs have been identified as critical reasons leading to a lower level of learning in TNE programs (Kanu, 2005; Pimpa, 2009; Waters & Leung, 2017).

Sometimes the background is transferred into students' new learning unconsciously. Volet (1999) discovered students of Confucian heritage culture often transferred familiar learning tactics, habits and beliefs such as memorization strategies, rote learning or the copying of text without references to cope with learning in Australia. Similarly, Pimpa's (2009) case study showed that due to accustomed hierarchy and a seniority culture, it was problematic for Thai students to understand the value of critical thinking and participate in classroom debates. Meanwhile, with proper guidance, contextualizing the learning content and using intercultural and transnational comparisons in lectures, students were able to make use of their previous experience to understand and apply new theories and foreign ideas to a local context (Hoare, 2012).

Recognizing the central role of students in learning and knowledge transfer, many international educators have increasingly considered students' background as well as *knowledge needs* in course design

(Bransford et al., 2000; Bransford & Schwartz, 1999). However, it has also been pointed out that it is important not to overly contextualize the content. This would lead to losing the whole idea of TNE and the opportunity to learn from different situations, interpret phenomena from intercultural and transnational perspectives and generate abstract knowledge. Hence, the literature shows that students being exposed to variation in content and context report clarity and confidence in what they have learnt and recognize possibilities to apply their knowledge in the future (Hoare, 2012; Kilbrink et al., 2018; Leberman et al., 2006).

Students' learning and the success of knowledge transfer cannot be considered without recognizing the role of *assessment* (Biggs, 1999, 2003; Gibbs & Simpson, 2005; Tennant et al., 2010). The focus has shifted from assessment of learning to assessment for learning and assessment as learning to consider assessment as a tool for engaging students in current and future learning, shifting the role of teachers to students as co-assessors and self-assessors. Central to these types of assessment is the important role of feedback and guidance, not just numeric grades at the end of courses, students receive to improve their learning. (Tennant et al., 2010)

Additionally, the *organization of the program* is seen as affecting students' learning and transfer. Most studies have shown that students only play a passive role in this aspect. For example, programs are often scheduled considering the availability of flying academics. Students also have little time and opportunity to bond with each other and with teachers to develop a sense of belonging and connectedness to their learning community found necessary for facilitating knowledge sharing and transfer (Berrell et al., 2001; Cannon, 2001; D'Annunzio-Green & Barron, 2019; Hoare, 2012). A tight schedule often leads to a situation in which teachers are required to cover as many topics as possible (Bransford et al., 2000; Waters & Leung, 2017).

Besides the motivation and background of students as well as program related factors discussed above, moving onto work life from the training, students' motivation to transfer knowledge is inevitably dependent on many *outside factors* – such as opportunities to use new knowledge, openness to change in their work environment, peers' and supervisors' support and restrictions (Tester et al., 2015). In a study of Vietnamese academic returnees, Truong (2017) discovered that when the work environment is discouraging, little knowledge is transferred regardless of the high motivation and confidence graduates have when returning to their organizations. Moreover, graduates' 'know with' is proven important not just for their academic success but also for the success of knowledge transfer at work. It is because their motivation to transfer could also be related to their beliefs and expectations (Holton et al., 2000) – which, in turn, are developed by their 'know with' about their organization or system of working, culture and practices. Accordingly, if they want to achieve

successful knowledge transfer, students need to associate new knowledge with their 'know with' about organizational culture, regulations and routines instead of transferring straight from one context to another (Lawson & Potter, 2012; Leberman et al., 2006; Napier, 2005; Szulanski, 1996). At the same time, they need to learn what, when and to whom to transfer their knowledge (Albino et al., 1998; Liyanage et al., 2009; Szulanski, 1996). In addition to graduates' active role, it is requisite that organizations provide a facilitating and motivating environment for transfer to happen.

Methods and data

Following qualitative research design, the data were collected by interviewing graduates from a two-year-long Finnish–Vietnamese TNE master's degree program during March 2019 and May 2019. The master's degree program in the field of administrative sciences was organized as a commissioned degree program between a Vietnamese higher education institution and a Finnish higher education institution (HEI). The collaboration between the partners is fairly recent, as Finnish HEIs only entered into the global TNE markets lately (e.g., Juusola 2020; Hasanen 2020). As a commissioned program, it was planned and executed by both HEIs, but the degree was issued only by the Finnish university. The contact teaching was held in Vietnam by the Finnish and Vietnamese teachers.

Out of 42 graduates, 13 were interviewed, of which 10 identified as women and 3 as men. All students in the program had 5-20 years of work experience in various positions in provincial- and central-level public organizations. Before entering the program, students took part in English language training organized by the Vietnamese HE partner. However, all interviews were conducted in Vietnamese to enable the participants to fully express themselves. Based on a pilot interview, the core questions and questioning style was revised to suit the Vietnamese way of communication. As the interviewees live and work in different cities in Vietnam and the researchers mainly work in Finland, most of the interviews (10) were conducted via Skype or Facebook's messenger.com and 3 interviews were arranged face to face. All interviews were recorded, transcribed and translated into English and anonymized.

Semi-structured interviews were used to collect data to enable interviewees to share their opinions and recall their experiences before, during and after the program. Despite being influenced by previous studies on knowledge transfer and the transfer of learning, the interview questions were designed to leave room for the views and interpretations of the interviewed. The transcribed data were analyzed by applying the methods used in content analysis in social sciences (e.g., Neuendorf, 2017; Schreier, 2014) by focusing on the selected aspects of meaning. The analysis began with pre-reading the data to get an overall view of the data by focusing on the content and meanings the interviewed wished to bring forward. While

being guided by the research questions, which had structured the interview questions, the repeating themes were pointed out and abstracted from the data. The purpose of the analysis was to condense the graduates' views and experiences on knowledge transfer in this particular context to bring forward their voice and perspective in a flexible, but structured, manner.

Findings

Transferred knowledge, skills and attitudes as outcomes of the TNE program

The interview data show more complex outcomes of TNE than just knowledge being transferred from education to work. Based on our analysis, these outcomes can be thematized into visible and invisible, with immediate or long-term effects. Specifically, all the interviewees asserted that they were able to apply certain knowledge learnt from the program in their work and improve their performance. These demonstrate visible outcomes, which can be recognized and measured by both the employing organizations and the graduates themselves. The usefulness and applicability of this knowledge varies from the ability to make more valuable comments in organizational meetings to playing a more active role in policy advising and evaluation. Explicit knowledge such as tools or standard processes were mentioned as being transferred in only a few cases.

According to the interviews, transferred knowledge is mainly characterized as tacit – including problem solving, critical thinking, research experience and self-study skills. While explicit knowledge can be put to immediate use depending on the tasks or positions of graduates at work; the portrayed tacit knowledge and generic skills can be applied in various situations regardless of tasks or job positions. For example, regardless of not directly working in the subject area, many interviewees reported that research, problem solving, and critical thinking skills helped them to improve their job performance and learning in future training sessions.

The valuable thing I got from the program is not a straightforward application of knowledge but the ability to think and learn. There's so much more knowledge; one area connects with others, and there are plenty of ways of looking at things. It's not black and white, right and wrong, but it depends on what approach one takes. I think that's the biggest gain for me. (Interviewee 07)

Besides knowledge and skills being transferred, according to the data, studying in the program also affected the graduates' attitude towards learning, research, knowledge sharing and ways of working. These could be considered as invisible outcomes of knowledge transfer, probably with long-term effects. Some interviewees expressed that learning in the program motivates them to continue learning, self-learn and do research to improve their knowledge and their work. The rigidity of the program also promoted

students' independent learning and integrity, which they appreciated and wanted to pass on others and their children.

Many of the interviewees expressed that they gained much confidence after the program, which affected their attitude at work. For example, the achieved confidence enabled them to speak out their opinions, go forward with new ideas or step out of their comfort zones to work on new tasks.

The skills and knowledge gained from the program made me feel more confident, so I sent that research proposal. At my organization, this kind of work is often made by researchers. Each year, we get funding for only three to four proposals, and this year, mine was one of the three funded proposals. Now I'm confident that I can do research – the type of work that was the domain of the research staff. This is beyond my expectation.

(Interviewee 07)

Contrary to the knowledge being transferred from teachers to students, the reverse way of transfer from students to teachers is not so evident. According to the data, some teachers, more than others, were reported to show interest in students' knowledge, considered the students as experts in their home country and were willing to learn from the students. However, in some interviews, students who were not aware of the collaboration done between the partner universities prior to the program suggested it would be better if teachers would learn more about Vietnam and students' backgrounds and learning needs or discuss with Vietnamese colleagues before coming to teach. Thus, it seems that although the program was transnational, it is still questionable whether knowledge transfer in this program was transnational or not.

The affecting determinants for knowledge transfer: Expectations, applicability of knowledge and issues relating to pedagogics and program organization

When starting the program, some students enrolled in the program mainly because they were assigned by the government as resource staff in need of capacity enhancement, while others applied to the program to realize their dream of getting quality international education in Vietnam as an alternative for studying abroad. Most of the interviewed students expected to learn professional knowledge useful for their career development. They wanted to learn practical and hands-on knowledge that could help them deal with specific problems or tasks at work. However, as mentioned, the most useful gain for them from the program was the generic skills that could be applied in different situations regardless of their work positions – such as research skills, problem solving skills, broader approaches, critical thinking and independent learning. Thus, it turned out that the professional knowledge was not the most valuable for them as they expected at the beginning.

Interviewees also brought their professional and educational background with them to the program, which both facilitated and impeded learning and knowledge transfer. During lectures, students used their extensive work experience and practical knowledge about the Vietnamese context and public administration system to help them learn faster and better. According to the data, the most popular tactic to learn was to make comparisons between the foreign countries and Vietnam, theories and practices, and reflect on what is useful and relevant for the students. As can be seen, their learning process was selective – as they tried to make sense of the taught knowledge (the ‘what’ and ‘why’), then decided on what is useful and important for them (the ‘how’) and absorbed that knowledge instead of all the knowledge that was being conveyed to them.

In my previous education, it was fully theoretical. The teachers taught whatever they like to talk about, and students just listen, even though I wouldn’t understand. But now, in this program, I listened to the teachers, and I could reflect on my experience and background knowledge. (Interviewee 03)

When making comparisons, students got ‘so much interested’ in the new knowledge, as it appeared different from what they were accustomed to in Vietnam. However, it became apparent that if the difference between the previously learnt and what they learnt from the program became too significant, it could become an obstacle for transferring knowledge into practice. Thus, it appears that the process of learning – making sense of knowledge, its relevance and its applicability to their work context – can happen while students receive and process new information, or it can happen later.

While the students actively used their professional backgrounds to support learning, their learning was affected by their Vietnamese educational background. While some new learning and teaching methods were considered interesting and effective, too contrasting educational experience was reported to have caused difficulties. For example, the freedom to choose topics for essays and written assignments was found confusing. Moreover, the requirements for doing research differed from what the students were used to – which caused the students to feel ‘lots of stress’ and ‘disappointment’ and get to the point of ‘almost giving up’, as it was described as a ‘very tough, tiring and time-consuming’ and an ‘overwhelming’ task.

One contrasting educational experience – which, nonetheless, supported students’ learning – was the students’ positive perception of foreign teachers in comparison with the Vietnamese teachers from their prior educational experiences. They repeatedly described the foreign teachers as ‘enthusiastic’, ‘caring’ and ‘friendly’. They looked at teachers with admiration of their teaching styles – their ‘pool of knowledge’ and ‘confidence’ and their way of ‘generously sharing’ their knowledge and

experience from teaching, doing research, and consulting for governments and other practitioners. Accordingly, a positive image of teachers can have a strong effect on students' motivation to learn and make it easier for students to accept and absorb new knowledge. On the other end, even though the students actively made use of their knowledge while learning, they rarely gave feedback to make the courses more useful for them and neither questioned nor expressed their concerns with teachers if they struggled with understanding and doing tasks.

In addition, the interviewees pointed out certain aspects related to the organization of the program affecting their learning. For example, due to the geographical distance between Finland and Vietnam, the students studied intensively for a week under contact teaching, followed by a long break until the next course was taught, resulting in 'knowledge popping out and fading away' and 'forgetting what was learnt in the previous course when starting a new one'. Also, the role of feedback from teachers was found important for their learning. Instead of just receiving grades, the students wished for more feedback to 'know how well I perform, how well I understand and apply the knowledge and what I need to pay more attention to'. Although the students thought these aspects mattered to their learning, it comes across from the data that the students felt they did not have much say on these matters because they considered themselves as lucky enough to have the opportunity to study in the foreign program and did not want to complain or ask too much.

Additionally, the interview data indicated the importance of peer support and sharing to motivation. A vibrant learning environment was created by 'texting each other days before the class and waiting for meeting classmates coming from other provinces'. Also, noticing that their peers came from different public organizations, positions and locations, with various practical experiences to share, they found that 'there are so many talents to learn from' and 'materials to share'. On the other hand, different learning paces among students slowed down the progress of the group.

The possibilities to use the acquired knowledge in work life

At work, when having the support from colleagues and being given the right tasks, some graduates reported being able to transfer knowledge to their work and share it with others inside and even outside their organization. The data clearly show that there was strong organizational support in terms of finance, workload and time allocated for studies, but often, the support ended there.

They send me to training about strategic management, but in the end, someone else is taking part in the strategic development. They don't use my knowledge or put me in a position where I can use my knowledge ... they don't care what I've learnt and what I can bring to work. (Interviewee 08)

Whilst not having the support needed from their managers or organization, many of the interviewed considered that the working culture and the wider system are resistant to change, which can demotivate and reduce willingness to make initiatives for improvements in their organizations. Thus, to make changes and get them approved, they accounted for the need to 'know some authorities; otherwise, there's no use in trying to effect changes no matter how talented you are' because 'only those in high positions and power can make changes'. Another reason for taking this passive and minor role in knowledge sharing is that the students did not feel safe enough to share. There was a reported concern of jealousy and 'showing off'. The attempts to share were reported as receiving 'silence', 'neglection' and a 'just-pass-on-it' reaction.

In summary, based on the analysis, it appears that more tacit knowledge has been transferred than explicit knowledge. In addition to knowledge, skills and attitudes also contribute as the major gains for graduates of the analyzed program – unexpected outcomes, compared to their initial expectations. Students' backgrounds play a critical role in learning and knowledge transfer. It seems the students were actively utilizing their prior knowledge and experience to support their learning, but too contrasting educational approaches between the prior and current program caused difficulties for learning, especially in challenging tasks. Finally, the ability to share knowledge and transfer knowledge to the workplace was rather limited due to the organizational and cultural features. Consequently, most transfer and sharing activities happened ad hoc and on an individual basis.

Discussion and conclusions – who learns what and how in transnational higher education?

This article studied knowledge transfer in the TNE context and found out that while the general literature on knowledge transfer emphasizes the high transferability of explicit knowledge compared to tacit knowledge (Gertler, 2003; Oddou et al., 2009; Polanyi, 1966; Williams, 2006) in transnational higher education, the situation may be more complex. One explanation for this could be that compared to task-specific training in higher education the degree programs aim to develop more general knowledge, capabilities and expertise that are not as tightly connected to certain tasks. Indeed, generic skills and tacit knowledge such as research capabilities, critical thinking, problem solving, and proposal-writing skills could be used across fields. Another possible explanation for the finding may relate to the nature of TNE. The cultural differences and the background characteristics of students may explain why students may not find the explicit knowledge as useful as the more tacit aspects of the programs.

In addition to the different types of knowledge being transferred, previous studies have extensively focused on the measurable impacts of knowledge transfer – especially on its impact on work performance (Broucker, 2010) and less on the transfer of motivation, attitude and other more tacit aspects and drivers of individual learning highlighted in this study. In the studied TNE program, explicit knowledge and skills, as well as a learning mind-set, were transferred. Increased confidence, motivation for continuous learning and even a transfer of the passion for learning and academic integrity to the next generation were mentioned as valuable impacts of TNE. The positive attitude towards self-learning and doing research can be connected to knowledge transfer, as the most successful transfer cases described in this study were attributed to the graduates' ability to continue learning and adapt new knowledge, while direct and straightforward knowledge transfer did not take place. This is supported by previous research arguing learning and transfer cannot be separately considered (Bormann, 2007; Kilbrink et al., 2018).

This study also showed how the students' motivation evolved during the program. Instead of depicting motivation as externally driven and as a static variable (e.g. Holton et al., 2000), in this study, students' initial motivation was to gain expertise, 'correct' and standard knowledge, as they formulated their expectations. According to the data, they started to realize the nature of higher education during the program and reported more nuanced knowledge, beneficial for their work and personal lives, being transferred. After the program, they were even more motivated to learn because they saw, in practice, the relevance and usefulness of what they had learnt. In the end, what they expected at the beginning turned out to be least transferable. The unexpected gains from generic skills and personal development show how initial motivation and expectations may not be determining factors of knowledge transfer after all, especially when considering a two-year educational program.

Whilst previous studies show that transferees' favorable perception of transferors is an essential factor for successful transfer (Albino et al., 1998; Oddou et al., 2009; Pimpa, 2009), this study found that this is not necessarily the case. Based on the data the students were not aware of their central role in learning but rather put it in the hands of teachers, of other students, and of the program organizers. This finding is particularly crucial for the success of knowledge transfer – as it is not just about receiving and reproducing knowledge but also about becoming the owner of the learning process and the knowledge to be able to monitor it, assess one's understanding and use knowledge for various purposes (Bransford et al., 2000).

When considering the knowledge transfer to students' workplaces, it is important to note that most of the work organizations did not have any plans for utilizing and leveraging the new knowledge. It is also worth

noticing that not only external forces but also their ‘know with’ (background) affects students’ motivation to transfer knowledge. Another explanation for the limited knowledge transfer at the workplace may relate to the type of knowledge being transferred. When sharing knowledge with colleagues, it is more about sharing the ‘knowing’ but not the ‘doing’. For example, the graduates expressed sharing knowledge about how things are done in Finland and elsewhere. Nevertheless, there were very few cases where the students had made things together with their colleagues using new knowledge. This has important implications not only for graduates’ work organizations but also for TNE programs generally. Generic skills have been proven to be widely useful and transferable and should be paid special attention in all programs. Whilst expert knowledge is often absorbed in the ‘knowing’ form and thus needs to be taught in the way that encourages its applicability, the ‘doing’ form is more or less ready to be transferred to work in any context.

As mentioned, the study highlighted the importance of students’ background knowledge which they facilitated to support their learning. Based on this study, there are two important aspects relating to ‘know with’ in learning and knowledge transfer in the TNE context. First, the conscious use of ‘know with’ had a positive effect on knowledge transfer and learning. However, when the new knowledge and student’s ‘know with’ conflict, the transfer process seems to stop. Instead, students switch to whatever way convenient for them and do not assimilate new skills or knowledge. This was more common to students with rich work experiences because their ‘know with’ had laid a strong foundation for getting things done long before their studies introduced them to new ways of working. Similar situations have been observed in previous studies (cf. Hoare, 2012; Pimpa, 2009; Volet, 1999). Second, as an implication of the former point, it is important that teachers acknowledge and are aware of conflicts between ‘know with’ and what they teach because this entails a struggle for students, and they need support in handling the situation (Tennant, 2000). Appropriate support may even strengthen the positive effects on learning; as was shown in this study, students learnt the most from the most difficult tasks.

This study contributes to the transnational higher education literature by showing that knowledge transfer as an outcome of TNE programs has wide and long-term effects that reach beyond individuals and their work. In addition to the field-related expertise, the students also gained generic skills and a positive attitude towards continuous learning and personal development – which, in turn, may have a large impact on society. The study, however, showed that as knowledge mediators, students might have quite a limited, passive role both in learning and knowledge transfer during their studies and later at their workplace. This study illustrates how students’ learning and knowledge transfer processes happen simultaneously and is constantly influenced by multiple external forces. Meanwhile, the

data highlight the importance of an internal factor – students’ ‘know with’ – background knowledge, skills and experience, which play critical roles and should be efficiently facilitated and embedded into the learning and knowledge transfer processes.

As expected, there are some limitations to our approach. A limited number of students in one TNE program were interviewed, which provides an incomplete view of the knowledge transfer since other informants might have raised different aspects of the knowledge transfer. However, a certain level of data saturation was attained, as no new issues were raised in the last interviews. This indicates that at least the most meaningful aspects of knowledge transfer related to this particular program were recognized. Later, it would be interesting to carry out a follow-up study with the same graduates to evaluate the impacts of the program after a few years. Accordingly, paying special attention to student’s perceptions of the contents, the outcomes and the impacts of TNE as well as portraying their role as knowledge mediators in the learning process provides relevant insight and information in developing future programs in the field of transnational higher education.

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