

A Value Co-Creation Perspective on Faculty Staffing

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Received: May 23, 2022

Accepted: June 29, 2022

Online Published: July 1, 2022

doi:10.5539/hes.v12n3p57

URL: <https://doi.org/10.5539/hes.v12n3p57>

Abstract

Colleges and universities increasingly employ temporary instructors. Researchers in higher education have voiced strong concerns about this trend because of its impact on educational outcomes, operations of academic institutions, and the composition of academic workforce. To enhance our understanding of this employment practice, this article makes three contributions to the research on the growing non-tenured employment in academia. First, we advance the theory by arguing that the *value co-creation framework*, also referred to as *service science*, is an appropriate theoretical lens for studying higher education, including faculty employment. Second, we use this framework to analyze operations of a selective undergraduate program in Finland that has been functioning for over 30 years without permanent teaching faculty. Housed at a premier business school, the program relies on an expansive international network of instructors who travel to teach on short-term contracts. Third, we demonstrate that the staffing model used by this Finnish program is distinct from other forms of temporary academic employment, and therefore we label it *a networked faculty staffing model*. To the best of our knowledge, this is the first time the *value co-creation framework* is used as a theoretical lens to study employment in higher education. Moreover, this is the first time *a networked faculty staffing model* is explicitly identified and described. Besides researchers, this article might be of interest to the diverse international audience who are involved in management and policy setting in higher education.

Keywords: faculty employment, tenure, contingent instructors, value co-creation, service science, Finland

1. Introduction

As academic leadership seems to have embraced a future in which higher education follows market-driven operational models (Christensen & Eyring, 2011; Cox, 2013; McGee, 2015), colleges and universities are increasingly relying on temporary instructors (Kezar, DePaola, & Scott, 2019). In the past 40 years, the share of American faculty who are in tenure-line positions dropped from 70 to 25 percent (The American Federation of Teachers, 2022). A common concern in the literature is that future teaching will be dominated by skillful “journeyman faculty” (Massy, 2016, p. 12; Kezar, DePaola, & Scott, 2019). Already, there is a growing global legion of itinerant academics who are mobile and entrepreneurial in pursuit of academic employment (Manning, 2018; Whitchurch, 2019). Critics point out that contingent employment demeans the faculty, discourages scholarship, undermines faculty influence on campuses, and therefore degrades the quality of academic experience for students (e.g. Bess & Dee, 2007; Childress, 2019; Cross & Goldenberg, 2009; Kezar, DePaola, & Scott, 2019; Professor X, 2012).

This article contributes to the ongoing debate on the future of higher education (e.g. Bunch, 2020; Hawawini, 2005; Kaplan, 2018; Kezar, 2018; Schlegelmilch, 2020) and the growing literature on temporary labor in academia (e.g. Childress, 2019; Kezar, 2012; Kezar, DePaola, & Scott, 2019). Our contribution is threefold. First, we advance the theory by arguing that the *value co-creation framework*, also referred to as *service science*, is an appropriate theoretical lens for studying higher education, including faculty employment. Second, we use this framework to analyze operations of an undergraduate program in Finland that has been functioning for over 30 years without permanent teaching faculty. Third, using the Finnish example, we identify *a networked faculty staffing model* that is distinct from other forms of academic employment, even though they share common attributes.

The following section provides the background by describing common staffing practices in academia. Then the article explains the value co-creation framework, which is followed by the analysis of the undergraduate program in Mikkeli, Finland. The discussion part identifies the networked faculty staffing model and provides additional details about the context in which the model exists by comparing the Finnish program to its two counterparts in the U.S. The conclusion section summarizes the findings, identifies limitations of this study, and suggests directions for future research.

2. Common Faculty Staffing Practices

While there are differences in employment practices across the globe, faculty are generally hired into either permanent or temporary positions. The practice of permanent academic employment is referred to as a tenure system. Even though the makeup of the faculty differs between institution, students are typically taught by a mix of permanent and temporary instructors (The American Federation of Teachers, 2022). This section reviews both tenure and temporary staffing practices, outlining their history and prominent characteristics.

2.1 Permanent Faculty

At the end of the 19th century and early in the last century, American universities treated instructors no different and paid them no more than skilled laborers (Lucas, 2006, p. 202). Faculty members served at the pleasure of the university president and its trustees. There was no job security or freedom of speech on campus. Censorship and faculty dismissals for criticizing the existing social order were common. For example, at the turn of the 20th century, the University of Wisconsin professors had to run their course reading lists for approval by the Board of Regents (Lucas, 2006, p. 204).

The situation began to change after 1940 when the American Association of University Professors (AAUP) set forth a Statement of Principles on Academic Freedom and Tenure (Lucas, 2006, p. 207). The Statement asserted professors' right to academic freedom to teach and research without outside influence as well as affirmed students' freedom to learn. It also deemed tenure as an essential mechanism for ensuring academic freedom. While the Statement lacked legal standing and could not be enforced, gradually universities accepted its general guidelines and the view that tenure is indispensable if universities were to fulfill their role in the society. The tenure system in American universities has been protecting the ability of the faculty to express opinions that might be unpopular with administration, colleagues, or rich benefactors (Cross & Goldenberg, 2009, p. 136).

It is common for tenure-track faculty to start on probationary six-year contracts (Bess & Dee, 2007), during which their research, teaching and service are continually evaluated. If tenure is granted, the position becomes more permanent because tenured faculty are fired only in a very narrow set of circumstances. Due to the tenure system, faculty employment may be lifelong and may be worth millions of dollars because professors qualify for extensive fringe benefits, such as health and life insurance, retirement benefits, startup research packages, sabbatical leaves, and conference travel (Bess & Dee, 2007, p. 29; Rosovsky, 1990, p. 166). To minimize costly mistakes, hiring for tenured positions and later promotions are arduous and lengthy processes that involve administrators and faculty. Tenured and tenure-track (TTT) faculty are involved in institutional policymaking through shared governance (Bess & Dee, 2007: 27; Cross & Goldenberg, 2009: 132; Zhang et al., 2020).

2.2 Temporary Faculty

In the temporary category, we differentiate between two types of academic employment: the contingent faculty and the flying faculty.

2.2.1 Contingent Faculty

Since the 1980s, American colleges and universities have been increasingly relying on non-tenured instructors (Bess & Dee, 2007, p. 30; Cross & Goldenberg, 2009; Professor X, 2012; The American Federation of Teachers, 2022). Because terminology varies across campuses, these instructors may also be referred to as contingent faculty, adjuncts, part-timers, itinerant lecturers, non-tenured specialists, professors of practice, and non-tenure-track (NTT) faculty (Bess & Dee, 2007, p. 30; Cross & Goldenberg, 2009). There are several drivers behind hiring more NTT faculty, which are indicative of economic forces in higher education (Kezar, DePaola, & Scott, 2019; Pettigrew & Starkey, 2016) and in the global economy (Mulcahy, 2017).

Universities want to avoid enrolling fewer students than their enrollment targets because that would create budgetary shortfalls (Pavlov & Katsamakos, 2020; Zaini, Pavlov, et al., 2017). It is more acceptable to overshoot the enrollment target because that provides extra revenue, even though more students add pressure on instructors and facilities. This pressure may be resolved by hiring temporary NTT instructors. Recruiting NTTs on short-term contracts is typically a quicker and less thorough process than hiring tenure-track faculty. Once hired, NTTs often stay on (Cross & Goldenberg, 2009, p. 43).

Another cause for hiring more NTTs is that they are significantly less expensive than tenured and tenure-track faculty (Cross & Goldenberg, 2009, p. 95; The American Federation of Teachers, 2022). NTTs are typically paid lower salaries while being assigned higher teaching loads, and they do not qualify for many benefits that tenured and tenure-track faculty receive. For example, while TTTs at major universities have been allowed one day a week for non-university activities (Rosovsky, 1990, p. 168), it is not the case for NTTs. As a result, administrators tend to limit the approval of new tenure-track positions in favor of NTTs (Cross & Goldenberg, 2009, p. 44).

The common criticisms of the contingent academic employment model are that non-tenure-track instructors are exploited because they teach many courses for relatively little pay, no benefits, have no job security and often need to commute between different institutions that employ them part-time (Cross & Goldenberg, 2009, p. 8). Contingent faculty are often excluded from decision-making on campus (Bess & Dee, 2007, p. 30) and not protected if they dissent from administration positions (Cross & Goldenberg, 2009, p. 133; Zaini, Elmes, et al., 2017; Zaini et al., 2019). These factors shift the balance of power towards administration (Cross & Goldenberg, 2009, p. 135; Kezar, DePaola, & Scott, 2019, p. 15). Another pervasive argument against the contingent faculty model is that it degrades the quality of instruction (Kezar, DePaola, & Scott, 2019; Manning, 2018; The American Federation of Teachers, 2022).

2.2.2 Flying Faculty

A form of temporary employment often referred to as the *flying faculty* model is popular with Western universities that offer offshore academic programs (Almond & Mangione, 2015; Dunn & Wallace, 2006; Smith, 2014; Szkornik, 2017; Whieldon, 2019). While also on temporary assignments, these instructors travel long distances, often thousands of miles, to their teaching locations. The flying faculty are typically recruited from among the instructors at the Western university that runs the program. The selected instructors deliver face-to-face courses in short modules, such as 10-days (Szkornik, 2017). During the short visits, instructors have opportunities to mingle with local students, faculty and staff and experience local cultures. Instructors report that experiencing foreign culture and forming new contacts can be professionally and personally fulfilling (Almond & Mangione, 2015; Smith, 2014). Some education managers see such international teaching as professional development that promotes careers (Smith, 2014).

Among the challenges mentioned by the flying faculty are long international travel, jetlag, isolation, teaching long hours, language barrier and cultural differences (Almond & Mangione, 2015; Smith, 2014; Szkornik, 2017; Whieldon, 2019). Moreover, the intensive teaching often requires changes to the instructional format even if instructors use the same materials as in their home institution (Whieldon, 2019, p. 64). In countries that do not share Western notions of academic code of conduct and critical thinking, visiting professors must adjust how they teach and assess students (Dunn & Wallace, 2006). For example, British instructors reported that incorporating active learning, including group activities, was challenging when they taught in China (Szkornik, 2017).

3. Higher Education is a Value Co-creation Process

Several authors (Judson & Taylor, 2014; Lella et al., 2012; Massy, 2016, p. 90; Pavlov & Hoy, 2019; Thomas & Ambrosini, 2020) have suggested that higher education is a value co-creation process. Developed to understand operations of modern service organizations (Spohrer et al., 2007; Spohrer et al., 2008), the *value co-creation framework*, also referred to as *service science*, defines services as the use of competencies and resources for the benefit of others (Akaka, Koskela-Huotari, & Vargo, 2019; Vargo, Koskela-Huotari, & Vink, 2020). Value to stakeholders may encompass multiple dimensions such as economic, functional, social, ethical, and emotional (Thomas & Ambrosini, 2020). The framework has been applied to a range of service organizations including an academic library (Lyons & Tracy, 2013), a transit system in San Francisco (Glushko, 2013), and an undergraduate entrepreneurship program (Pavlov & Hoy, 2018).

The value co-creation framework consists of ten foundational concepts and elements (Maglio & Spohrer, 2013; Spohrer et al., 2007; Spohrer et al., 2008). Beyond the boundary of a service organization is an *ecology* of other organizations, regulations, laws, and markets. A *resource* is anything that can be used in service production such as people, information, buildings, vehicles, intellectual property, financial resources, and technologies. Resource availability and usage are regulated through *access rights*, which are codified as formal and informal contracts. Resources are provided by *stakeholders* who are connected to the service organization through professional, organizational, and other types of *networks*. Resource configurations capable of value creation within service organizations are called *entities*. Formal and informal *governance* mechanisms direct organizations towards *outcomes* that are valued by stakeholders, while minimizing conflicts. The performance of *value co-creation*

activities is tracked through a set of *measures*.

While still rare in the literature on academic operations (for examples see Pavlov & Hoy, 2018; Thomas & Ambrosini, 2020), when applied to education, the framework views students, faculty, staff, alumni, and other stakeholders as co-creators of value within academic institutions. Moreover, to account for the highly connected and mobile nature of the modern world, the theory examines how educational organizations rely on academic, institutional, and professional networks to gain access to valuable resources. Through this modern theoretical lens, colleges and universities are seen as “spheres of collaboration” (Thomas & Ambrosini, 2020) that aggregate resources and bring together stakeholders with complementary expertise for creating value. Framing education as a value co-creation process, rather than using a manufacturing analogy (e.g. Towner, 2017), is important because that helps us avoid misleading interpretations of the educational process and keeps us from making wrong conclusions that can, if applied to practice, lead to disastrous decision errors by administrators, trustees, donors, and legislators (Massy, 2016; Winston, 1997).

To the best of our knowledge, this article is the first time the value co-creation framework is used to understand the varied contexts of faculty employment. The following section examines the business program in Mikkeli through the theoretical lens of value co-creation, which helps us understand the context of the *networked faculty staffing model* that we define later in the article.

4. Example: The Aalto Mikkeli Program

In 1989, The Helsinki School of Economics started The Bachelor’s Program in International Business in Mikkeli, which is a city about 250 kilometers north-east of Helsinki. Formally, the program is called the Bachelor of Science Degree in Economics and Business Administration, which is abbreviated as BScBA (Lofgren & Leigh, 2017). In 2010, three major Finnish universities -- The Helsinki School of Economics, The Helsinki University of Technology, and The University of Art and Design Helsinki – merged to form Aalto University (Farny & Kyro, 2015; Tienari, Aula, & Aarrevaara, 2016). The main campus is now located in Espoo, a city near Helsinki. The new Aalto University kept the BScBA program. The program, we will refer to it as Aalto Mikkeli, is an English-language program taught almost entirely by visiting faculty from around the world who come to teach intensive three-week courses. None of the instructors have permanent contracts with the program. Most visiting instructors have tenure or tenure-track faculty appointments at other universities. This staffing arrangement developed serendipitously because The Helsinki School of Economics could not guarantee that enough instructors would be available to teach at its satellite campus in Mikkeli. Therefore, the founder of the program turned to his contacts abroad, thereby initiating the international Mikkeli faculty network. Table 1 provides key facts about the Aalto Mikkeli program using the pre-pandemic data.

4.1 Ecology

Aalto Mikkeli is a program in the School of Business at Aalto University, and it is part of the global ecology of accredited business programs. The School of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB), the European Quality Improvement System (EQUIS), and the Association of MBAs (AMBA). For many years, Aalto Mikkeli was the only university-level business program in English in Finland. But due to their popularity, the number of English-language Bachelor’s programs has been growing, including at Aalto University (e.g. in economics) and elsewhere in Finland and Europe, such as BI in Norway (<https://www.bi.edu>) and Kedge Business School in France (<https://student.kedge.edu>).

Table 1. Key facts about the Aalto Mikkeli program. All academic statistics are for the pre-pandemic AY2018-2019. Source: Program Director

Program established	1989
Degree awarded	Bachelor of Science Degree in Economics and Business Administration
Business school accreditations	AACSB, EQUIS, AMBA
Full-time enrollment	Approximately 250 (including about 70 exchange non-degree students; 2/3 of degree students are from Finland, 1/3 of degree students are from abroad)
Student applications	700-800 applicants
Acceptance rate	10%
Annual graduates	80
Graduation rate within 3 years	95%
Visiting faculty	Approximately 60 per year
Full-time staff	10
Courses offered	Approximately 80 per year
Course modules	15 per year
Academic calendar	3-week modules year-round
Partner universities	About 50 globally
Number of classrooms	5 + auditorium (rented as needed)
Tuition	EUR 0 for students from Finland, European Union (EU) and European Economic Area (EEA); EUR 12,000 / year for students from outside of Finland, the EU and EEA
Annual budget	Approximately EUR 1.5 million

4.2 Resources

In terms of instructional resources, the program invites over 60 faculty to teach about 80 courses per year. Ten to twelve instructors a year are recruited locally at Aalto University or other Finnish universities. Approximately 80 percent of the Aalto Mikkeli faculty return year to year. Table 2 shows statistics for new and returning faculty.

Table 2. Aalto Mikkeli faculty: new and returning

Academic Year	Returning	New	Total
2016-2017	77% (46)	23% (17)	100% (63)
2017-2018	77% (48)	23% (14)	100% (62)
2018-2019	80% (49)	20% (12)	100% (61)
2019-2020	87% (44)	13% (8)	100% (62)

Units: percent (instructors). Source: Program Director

The program is supported by 10 full-time staff, including the Program Director. The Program Director is the only staff member with a Ph.D. and the only staff with a teaching load. The staff are engaged in back-office support of the program and academic advising. The program does not employ any maintenance and facilities staff.

Aalto Mikkeli has stable budget funding of about EUR 1.5 million from the School of Business. The program rents two floors in a modern office building in downtown Mikkeli with several classrooms, offices for staff and visiting faculty, study rooms for students and a small kitchenette. The building is shared with other non-profit and educational organizations. The landlord provides custodial and maintenance services. A small library in a neighbouring building is shared by The Mikkeli University Consortium, which is a local networked academic community of three universities and the City of Mikkeli. Most of the students live in dorms that are owned and maintained by an independent housing company called MOAS (<https://www.moas.fi/en/>). Some students rent apartments in the city. Visiting faculty stay in apartments rented for them by the program in the local real estate market. The program offers no amenities. Instead, students, faculty and staff rely on the city infrastructure that includes gyms, grocery stores and public healthcare facilities. Student housing and meals at the local cafeteria are subsidized by the Finnish government.

4.3 Access Rights

The value co-creation framework pays special attention to how organizations access resources. In Mikkeli,

visiting instructors are offered short-term teaching contracts that are negotiated on an annual basis for each course. This requires continuous recruitment. Figure 1 shows recruitment processes for new and returning faculty that are more streamlined than for typical academic tenure-track positions. Hiring new faculty involves the following steps:

1. **Networking:** The Program Director continuously networks with potential instructors at conferences, through the visiting business faculty, and through social media.
2. **Survey:** New contacts are added to a recipient list for an interest-and-availability survey, which is distributed in December-January for the following academic year. Approximately 120 faculty around the world respond to the survey.
3. **Reports:** A report is prepared that lists available instructors.
4. **Vetting/Interview:** If prospective instructors are interested in teaching, the Program Director requests that they submit course feedback data from their past teaching elsewhere. This is followed by one or two virtual interviews.
5. **Invitation/Acceptance:** Once agreement with the perspective faculty is reached, the Program Director issues individual invitations for instructors. A document with proposed courses and selected instructors is submitted for approval first to the Mikkeli Program Committee and then to the School of Business Committee on Academic Affairs, both committees comprise academics from the main campus in Espoo, elected student leaders and alumni. Once the curriculum is approved by the Committee on Academic Affairs, all faculty are contacted with contract information.
6. **Onboarding:** Several months before the course, the Program Director has virtual calls with new faculty for onboarding.

With the returning faculty, the process is simpler. It consists of the following steps:

1. **Check of availability:** The Program Director checks the survey report whether the instructor is able and willing to return.
2. **Review of course feedback:** The Program Committee in Mikkeli reviews course feedback in November. Instructors who had poor performance are put on the “watch list” and calls are arranged to discuss individual plans for improvement.
3. **Invitation/Acceptance:** The program sends formal invitations. Confirmations are forwarded to the Human Resources Coordinator and Manager of Academic Operations.

To increase the supply of potential instructors, all courses are taught during short modules. The high annual recruitment volume and the small staff in Aalto Mikkeli demands the streamlined hiring process.

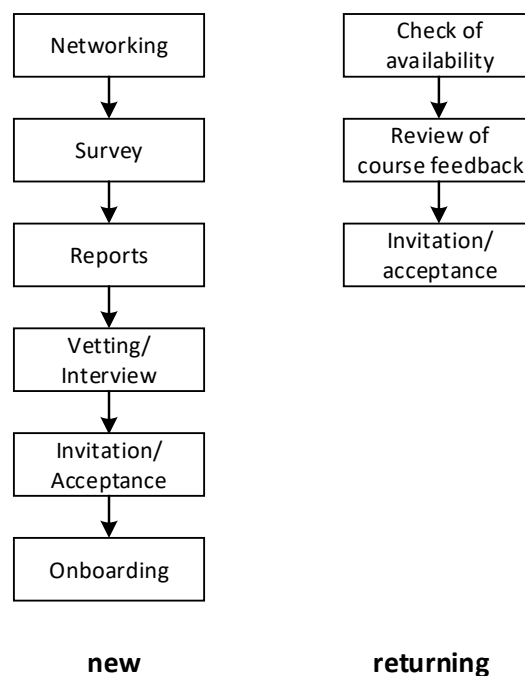


Figure 1. Recruitment processes for new and returning faculty

4.4 Students

The key stakeholders in any higher education institution are students. Each year, 80-85 students are admitted into the program from over 800 applicants. In total, about 200-250 students attend courses each year. The degree students comprise about 2/3 Finns and 1/3 international students. Each entering class is organized into two sections (A and B) of about 40 students. At any time, there are about 70 non-degree exchange students, who come from partner universities usually for four to five months.

4.5 Networks

The program maintains and draws from an active network of about 120 instructors, mostly from North American and Western European universities. Developed over the years, this virtual network of faculty is a characteristic attribute of Aalto Mikkeli that allows close matching of the faculty expertise and the instructional needs of the program.

All students spend a semester abroad. The university partner network includes about 50 universities around the world.

4.6 Entities

Entities are internal organizations that contribute to the value co-creation process. Unlike many American universities, Aalto Mikkeli does not employ a cadre of professional staff dedicated to student life. Most of the events are coordinated by the student association called Probba, which is a local branch of a formal student organization of the School of Business, known as KY. KY is part of the university-wide student organization AY. Probba, KY and AY are part of national student organizations. Besides arranging numerous social events, KY and Probba advocate on behalf of business students to Aalto University. Elected Probba representatives provide feedback to administration on teaching quality, facilities, and many other issues of relevance to students.

4.7 Governance

While Aalto Mikkeli is part of the School of Business, the program has historically enjoyed significant autonomy from the main campus. Since its inception, the program has been managed by a Program Director located at the Mikkeli campus. Even though Aalto University introduced a matrix organizational structure several years ago that led to tighter integration of the Mikkeli staff with the main campus, the program still maintains significant operational autonomy. The visiting faculty are not involved in the formal governance structure of Aalto University.

Students participate in the shared governance through the course feedback, the student organization Probba and class representatives. The Probba Board, which is elected by students annually, meets with the Program Director once each module, i.e. 15 times a year. Two additional class representatives are elected by each student section – there are two sections (A and B) formed every year – to liaise between students and instructors. These representatives advocate for student interests and concerns during the academic year.

The Program Quality Committee at the Mikkeli campus, comprising the Program Director and two other local senior staff members, reviews course feedback reports and identifies any necessary follow-up steps. In addition, a Student Quality Committee advises administrators on various development issues emerging within the program.

4.8 Outcomes

The main outcome of Aalto Mikkeli is the students who graduate with a Bachelor of Science Degree in Economics and Business Administration with concentration in International Business. Each student completes up to 15 modules of study each year (see Appendix for a typical course schedule). Most courses require 45 contact hours and carry 6 European Credit Transfer and Accumulation System (ECTS) credits (https://ec.europa.eu/education/resources-and-tools/european-credit-transfer-and-accumulation-system-ects_en). Students are expected to spend two years doing coursework in Mikkeli and a semester abroad at a partner university in the third year, usually in the fall. Students complete most of the required courses in the first year and beginning of the second year and usually start taking electives in the fall of their second year. All students are required to study abroad by taking advantage of one of the university partnerships that the program maintains around the world. A Bachelor's thesis is completed during the second year of study. Thus, students complete the European three-year Bachelor's degree in two and half to three years. Historically, the graduation rate within three years has been about 95 percent.

4.9 Value Co-creation

The program maintains a tight-knit academic community comprised of students, visiting faculty, and staff.

Courses are offered year-round in intensive three-week modules with students taking one course at a time. Small groups of international faculty rotate every module. Their international backgrounds and English proficiency are a significant plus for this undergraduate program that focuses on International Business. Each professor teaches one course at a time thus focusing their entire attention on students in one section. The location of administrative offices and classrooms on two floors in the same office building encourages frequent interactions of students with faculty and staff. Potential problems are frequently resolved before they escalate due to the personalized attention received by students and the visiting faculty.

4.10 Measures

As any program at Aalto University, Aalto Mikkeli reports data to the main campus that are compared against the Key Performance Indicators (KPIs) set by the Finnish Ministry of Education. The KPIs are increasingly outcomes-oriented, moving from factors such as internationalization to placing more weight on the number of degrees completed. Additionally, the program staff track student satisfaction through student feedback at the end of each course and at the program level at the time of graduation.

5. Discussion

The above analysis follows the value co-creation theoretical framework while describing operations of an academic program at Aalto University that hires instructors on short-term contracts. The employment model used by the program shares attributes with other common faculty staffing approaches. However, it is distinct, and therefore we differentiate it by labeling it the *networked faculty staffing model* (see Table 3). Similar to contingent and flying faculty staffing models, instructors in the *networked faculty staffing model* are on temporary contracts. While these instructors may travel long distances to their teaching location, which is similar to the flying faculty model, they are not sent to Finland by their home institutions, but instead they sign new contracts with the host program, which is Aalto Mikkeli. As in the case of the flying faculty, the course duration in Mikkeli is shortened to accommodate instructors. As typical for all temporary positions, the recruitment process is streamlined when compared to the tenure-line jobs. However, just like for a typical permanent position, instructors in the networked model are recruited in the global academic marketplace.

Table 3. Key attributes of the faculty staffing models

Attribute	Permanent	Contingent	Flying	Networked
Contract	Permanent (tenure)	Temporary	Temporary	Temporary
Employer	Home institution	Home institution	Home institution	Host institution
Teaching location	Home institution	Home institution	Host institution	Host institution
Course duration	Typical	Typical	Shortened	Shortened
Recruitment process	Extensive	Streamlined	Streamlined	Streamlined
Candidate search	International	Local	Home institution	International

The risks associated with not having permanent faculty are mitigated by maintaining an extensive network of instructors who are tenured or tenure-track elsewhere and who are interested in short-term teaching in Mikkeli. Due to the large size of the network, courses do not need to be cancelled in rare cases when a scheduled instructor unexpectedly withdraws, and an alternate professor needs to be identified quickly for the course. An active network of about 120 pre-screened instructors who are ready to travel appears to be sufficient for a program the size of Aalto Mikkeli. Moreover, the recent experience during COVID-19 proved that this *networked faculty staffing model* could successfully weather a global health pandemic when all courses were online.

Teaching quality has been identified as a concern for programs that employ temporary instructors (Cross & Goldenberg, 2009; Kezar, DePaola, & Scott, 2019; Manning, 2018; The American Federation of Teachers, 2022). Table 4 shows consistently high marks from graduating students for their experience in Aalto Mikkeli. While teaching quality includes many dimensions, at least as far as the student satisfaction is concerned, the Mikkeli case demonstrates that the networked faculty model can lead to high student satisfaction.

Table 4. Student feedback upon graduation

Question	2013	2014	2015	2016	2017	2018	2019
Communication with the teaching staff	4.33	3.94	4.33	4.53	4.11	4.33	4.53
Feeling comfortable at my university	4.00	4.67	4.65	4.50	4.19	4.36	4.53
Helpfulness of the feedback from teachers	4.17	4.18	4.44	4.41	4.00	4.05	4.28
Inf. and supp. on different aspects of studies	4.33	3.85	4.07	3.85	3.89	4.09	4.38
My education meets my expectations	4.17	4.21	4.44	4.44	3.85	4.22	4.41
Opportunities to influence and participate	3.00	3.76	4.07	3.85	3.87	3.98	4.15
Quality of teaching	4.50	4.45	4.63	4.74	4.40	4.56	4.69
Satisfaction with the course of studies	4.50	4.30	4.35	4.35	3.96	4.22	4.28
Support for the Bachelor's thesis	4.17	4.36	4.41	4.00	4.13	4.18	4.56
Support for the organization of studies	4.33	3.94	4.04	4.06	3.91	4.13	4.28
Teaching methods	4.33	4.42	4.63	4.47	4.19	4.09	4.38
The skills acquired met my expectations	4.50	4.09	4.26	4.32	3.74	4.16	4.25
When needed, I knew whom to turn for help	4.17	4.09	4.30	4.41	4.09	4.35	4.50

Scale: 1 (poor) to 5 (excellent). Pre-pandemic data. Source: Program Director.

Table 5 compares Aalto Mikkeli to two representative business programs in the U.S. at Babson College and Bentley University, which are well-respected, relatively small (less than 5,000 students), and AACSB-accredited. With the acceptance rate of around 10 percent, Aalto Mikkeli is more selective than the other two programs. The 3-year graduation rate of the Finnish program is better than the 4-year graduation rates of the American programs. While this article does not focus on the cost of education, it is interesting to note that the European program is significantly cheaper to run than its U.S. counterparts. The expenditures per student at Babson (\$55,781) and Bentley (\$44,006) are within the ballpark of the average operating expenditure per student in the U.S., which is \$48,000, while the most selective U.S. colleges spend as much as \$102,000 per student (Caskey, 2018). The expenditures per student at Aalto Mikkeli is about \$9,000.

Table 5. The Aalto Mikkeli program compared to two American business programs

	Aalto Mikkeli	Babson College	Bentley University
Graduation rate (2014 cohort)	95% ¹	92% ²	84% ²
Acceptance rate	10%	24% ³	44% ³
UG degree-seeking headcount	180 ⁴	2342 ⁵	4111 ⁵
FTE enrollment (2017-2018)	203 ⁶	3708 ⁷	4959 ⁷
Total operating expenses (FY2018)	\$1,770,000 ⁸	\$206,835,910 ⁹	\$218,225,000 ¹⁰
Expenditures per student	\$8,719 ¹¹	\$55,781 ¹¹	\$44,006 ¹¹
Total UG degrees (July 2017-June 2018)	60 ¹²	577 ¹³	1072 ¹³
% business degrees	100%	100% ¹³	92% ¹³
Number of business degrees	60	577 ¹³	984 ¹³

Notes:

1. The BScBA program is 3 years; therefore, this is a 3-year graduation rate

2. 4-year graduation rate (2014 cohort). <https://www.usnews.com/best-colleges/rankings/highest-grad-rate> (Accessed on Dec. 5, 2021)

3. Fall 2017 data. IPEDS Admissions (Academic Year 2018) - Accessed Dec. 5, 2021

4. BScBA students

5. Fall 2017 UG degree-seeking headcount. IPEDS Fall Enrollment (Academic Year 2018) - Accessed Dec. 5, 2021

6. 180 BScBA students + 1/3 * 70 Exchange students. This is based on IPEDS calculation for FTE enrollment (FT + 1/3 PT)

7. FTE Enrollment includes undergraduate and graduate students. IPEDS 12-Month Instructional Activity, Academic Year 2018 - Accessed Dec. 5, 2021

8. The program budget for FY2018 was EUR 1,500,000. It was converted to USD at exchange rate of 1.18 USD/EUR (Exchange rate reported by Morningstar on Nov 10, 2020)

9. Source: Babson College Consolidated Financial Statements. 2018.

<https://www.babson.edu/offices-and-services/business-and-financial-services/financial-reports/> (Last accessed Nov 12, 2020)

10. Source: Bentley University Financial Statements 2018.

<https://www.bentley.edu/offices/financial-operations/financial-statements/> (Last accessed Nov 12, 2020)

11. Total operating expenses / FTE enrollment

12. 180 FT students / 3 years to degree. This does not include graduate students.

13. Total degrees & % of business majors (2017-2018). IPEDS Completions Academic Year 2018 (First major) - Accessed Dec. 5, 2021

6. Conclusion

This article makes three contributions to the research on the future of higher education and the growing non-tenured employment in academia. First, the article advances the theory by arguing that the *value co-creation framework*, also referred to as *service science*, is an appropriate theoretical lens for studying higher education, including its staffing practices. Second, we use this framework to analyze operations of a selective undergraduate program in Finland that has been functioning for over 30 years without permanent teaching faculty. Third, we demonstrate that the staffing model used by this Finnish program is distinct from other forms of temporary academic employment, and therefore we label it a *networked faculty staffing model*.

To overcome limitations of this study, future research may examine if certain characteristics of the academic program in Mikkeli are instrumental for its longevity, but may not be present elsewhere, thus limiting the scope of this staffing model. Additionally, this article does not examine topics that are important in the context of faculty employment such as freedom of speech guarantees (e.g. Cortina, Cortina, & Cortina, 2019), the role of shared governance (e.g. Curnalia & Mermer, 2018), or race and gender balance among instructors (e.g. Grier & Poole, 2020; Kelly & Winkle-Wagner, 2017; Pietilä et al., 2021). Future research could also investigate the position of Aalto Mikkeli within the academic labor markets in Finland (e.g. Pietilä 2019; Pietilä & Pinheiro, 2021) and the other Nordic countries (Pietilä et al., 2021).

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Appendix

This appendix shows a typical academic schedule at Aalto Mikkeli. The schedule is for the academic year 2019-2020. Students progress through the curriculum as a cohort of about 80 students, which is divided into two sections of 40 students. Each student takes only one course per module. Non-elective courses are taken one at a time by the entire section. Students also spend one semester taking courses abroad at partner universities.

Module 1: Sept. 2-20, 2019

Global Business Environment
Intercultural Management
Principles of Finance
Comparative Consumer Behavior (Elective Course)
International Human Resource Management (Elective Course)

Module 2: Sept. 23- Oct. 11, 2019

Business Mathematics with Excel Applications
Introduction to Management
Intercultural Management
Principles of Finance
Digital Disruption (Elective Course)
Asian Business and Management (Elective Course)

Module 3: Oct. 14- Nov. 1, 2019

Introduction to Management
Business Mathematics with Excel Applications
Principles of Finance
Intercultural Management
Global Game Industry (Elective Course)
Managerial Accounting for Global Business (Elective Course)

Module 4: Nov. 4-22, 2019

Academic Writing
Introduction to Statistics
Research Methods in International Business
Introduction to Business Law
International Business Strategy (Elective Course)

Module 5: Nov. 25- Dec. 13, 2019

Introduction to Statistics
Academic Writing
Introduction to Business Law
Research Methods in International Business

Critical Thinking (modules 5-6) 2 cr
International Marketing (Elective Course)

Module 6: Jan. 6-24, 2020

Business Communication (3 cr) (Jan. 3-12)
Communication and Project Management (3 cr) (Jan. 13-21)
Principles of Economics
Investments and Portfolio Management (Elective Course)
Brand Management (Elective Course)
Gender and Communication in the International Workplace (Elective Course)

Module 7: Jan. 27-Feb. 14, 2020

Principles of Economics
Communication and Project Management (3 cr) (Jan. 27- Feb.4)
Business Communication (3 cr) (Feb. 5-14)
Business Consulting in the Global Economy (Elective Course)

Module 8: Feb. 17- March 6, 2020

Principles of Accounting
Corporate Finance (Elective Course)
Digital Marketing Strategies (Elective Course)
Leadership (Elective Course)

Module 9: March 9-27, 2020

Swedish Business Communication (3 cr)
Finnish for Foreigners begins (continues in module 11), 3 cr
Intermediate Microeconomics (Elective Course)
Entrepreneurship in the Global Economy (Elective Course)
Travel, Tourism and Hospital Marketing (Elective Course)

Module 10: Apr. 6-24, 2020

Operations Management
Introduction to Marketing
Capstone Course
Innovation Management in the Global Economy (Elective Course)

Module 11: Apr. 27- May 15, 2020

Finnish Business Communication (3 cr) (Apr. 27- May 8)
Finnish for Foreigners (cont. from module 9; Apr. 27- May 8) (3 cr)
Corporate Responsibility and Ethics (3 cr) (May 11-15)
Financial Accounting for Global Business (Elective Course)

Green Ventures (Elective Course)

Module 12: May 18 – June 5, 2020

Operations Management

Introduction to Marketing

Social Media Analytics (Elective Course)

Intermediate Macroeconomics (Elective Course)

Modules 13: June 8-26, 2020

Basics in Business French

Basics in Business Spanish

Basics in Business German

International Sales Management (Elective Course)

Management Information Systems in International Business (Elective Course)

Modules 14: June 29- July 17, 2020

Basics in Business French

Basics in Business Spanish

Basics in Business German

Business and Management of Digital Media Production (Elective Course)

Environmental Economics (Elective Course)

Module 15: July 27 – Aug. 14, 2020

French Business Communication

Spanish Business Communication

German Business Communication

Tools for Data Analysis (Elective Course)

International Business to Business Marketing (Elective Course)

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