Erasmus+ Capacity Building in Higher Education
Indonesian Higher Education Leadership

Piloting Leadership Development Program 2022

Module 3.2: Managing Resources – Managing Faculty/Staff and Physical Resourcing

Description	This module focuses on the understanding of Managing Resources (Faculty/Staff and Physical Resourcing)
Duration	2 hours
Training outcomes	• Participants are expected to: 1. To identify the issue of human resources planning, relating staff qualification and student-to-staff ratio and environmental setting change 2. To structure the employment status and workload policies 3. To identify the need of the physical resourcing in the higher education
Sequences	• Presentation and Q&A (45 minutes) • Group work (25 minutes) • Group presentation (15 minutes) • Self-reflection/insight (5 minutes)

Case study (45 minutes)	• Method: Group discussion (4 groups)
	• Output
	  ◦ Action plan to develop the positive work relations
	• Material
	  ◦ WiFi/internet connection
	  ◦ Computer/laptop/tablet/smartphone
	• Instruction
	  ◦ All participants will be divided into 4 groups randomly.
	  ◦ Each group will discuss the assignments in the worksheet.
	  ◦ Facilitator will stop the discussion of all groups in the due time.
	• Assignment
	  ◦ Focus on one case or problem to be discussed in group.
	  ◦ Explain about the problems and challenge of the case of staffing and infrastructures in higher education.
	  ◦ Evaluate the weakness and analyse why the cause and it should be improved based on the staffing and infrastructures concept.
	  ◦ Conclude the lesson-learned from the case.
	  ◦ Describe a strategic/action plan in the case of higher education based on the case study.

1. Introduction

This module presents the policy issues related to human resources in higher education. The quality of institutions' teaching and learning, research, and engagement with the wider world/services (*Tridarma Perguruan Tinggi*) depends importantly on the skill and ability of the higher education workforce, and the conditions in which they work.

The term "human resources" in higher education refers to all those employed in higher education institutions. It includes academic staff (those whose primary role is teaching or research or supporting teaching or research), those providing professional support for students (academic, health and social support), those involved in the management and administration of institutions, and personnel who support the maintenance and operations of institutions (security, ancillary services). However, because teaching and research are the "business of the business" for universities therefore the module more likely to discuss about the academic staffing resources.

In addition, physical descriptors of teaching activity need also to be identified. The data come from the university's timetabling and student registration systems, not its accounting system. It highlights the trade-offs between quantities such as class size, duration, frequency, on the one hand, and faculty teaching loads, on the other.

2. Main Activities

1. Material

Human Resource Mobilization

Staff qualifications

Higher education systems may establish minimum standards concerning the academic and professional qualifications required to enter into or advance in the academic profession. A doctorate is often a prerequisite to enter an academic career. Quality assurance agencies may also ensure that a minimum proportion of staff holds the necessary academic and professional qualifications, according to the mission of institutions and programmes.

In some countries including Indonesia, governments have developed training programmes to bring the qualification level of academic staff to minimum levels and have allowed current staff the time and resources to upskill (e.g. funding of doctoral studies of existing or new staff). In terms of internationalization, governments may also make it possible or easier to recruit foreign staff with the required qualifications, especially to address shortages in the short-term.

Staff numbers and student-to-staff ratios

The ratio of students to academic staff is a central characteristic of educational institutions, shaping the structure of their costs, and providing the principal resource with which student learning can be supported.

Student-to-staff ratios may be used as a proxy for the quality of teaching and student-instructor interaction in rankings and media reports. Student-to-lecturer ratios are a very rough proxy for quality, since they do not reflect the duration, intensity or quality of interaction between students and instructors.

These ratios may influence consumer choice among institutions. Moreover, such ratios are typically monitored by quality assurance agencies as a proxy for quality, and institutions or programmes often have minimum staffing ratios (and qualifications) set by external quality assurance bodies.

The digitalisation of learning and teaching has the potential to alter the relationship/ratio between student and academic staff numbers, possibly decreasing the need for academic staff and/or by replacing academic staff with other professionals. Thus, the use of student-to-staff ratios by quality assurance agencies as a proxy for quality, or as a policy target by government ministries, poses risks to cost and innovation.

Structuring the work and careers of the higher education workforce

The second core task of institutions in the area of human resource management in higher education is to structure the workforce and career progression. Institutions need to make decisions regarding the careers of academic, professional and managerial staff (as well as their duties and workload) and reflect on the implications of digitalisation for academic work.

The profile and numbers of staff in higher education result from the recruitment practices of higher education institutions, and also from the way that staff careers are structured. To improve the quality and equity of higher education, career structures need to be sufficiently attractive to appeal to, and retain, talented staff. At the same time, they need to be designed to balance cost and efficiency. In addition, academic career structures need to address adequately the multiple functions and roles that universities and other types of higher education institutions perform in modern societies.

As the missions of higher education institutions have become more varied, it is increasingly difficult for academics to perform all roles well: training future professionals; conducting research; engaging in international projects; collaborating with business, public service and the social and cultural sectors. Academic role in many systems are becoming more differentiated and increasingly linked to individuals' capabilities and preferences, with different components of administration, management and leadership, and other activities.

The employment status of academic staff

Institutions seek to balance stability against flexibility in their staffing. Some forms of staff employment status (e.g. civil servant status, tenure) come with strong employment guarantees for the staff concerned and place strict limits of the flexibility of human resource in higher education institutions. For this reason, some systems have abolished civil servant status for academic staff (e.g. Austria), or tenure arrangements (e.g. the United Kingdom), and have granted institutions the right to determine the employment and working conditions of their staff. Meanwhile the case in Indonesia tend to be diverse, combination of civil servant status and more flexible arrangements.

The other issue is trade-off between full-time or part-time (casual) of staffs. In the case of many countries, academics focusing on research usually "buying out" their teaching time. This reduces the number of permanent academic staff available for teaching, increases the share of instruction assigned to casual, mainly teaching-only positions, and allows institutions to pay higher salaries to their full-time permanent staff, who are mostly rewarded for research performance. Using casual staff to reduce the teaching loads of full-time academics allows them to generate more external research funding.

However, extensive casualisation of staff - and the deterioration of working conditions for some - may have detrimental effects on attracting and retaining talent, and on the motivation and performance of staff. Most importantly, casualisation of academic work may have an adverse effect on students. There is evidence from the United States that institutions with a higher concentration of non-permanent (contingent) academics, particularly working part-time, are those where students at risk of non-completion (such as part-time and low-income students) are most likely to study. Research suggests that the increased use of temporary part-time academics has some negative consequences for the quality of teaching and learning.

In research-led universities the intensive research commitments of permanent staff may result in weak investments in undergraduate teaching. In one elite research-intensive university, it was found that undergraduate students learned more from nontenured faculty than tenured professors in their first-term courses. The differences were present across a wide variety of subjects and were particularly pronounced for average and less-qualified students.

Academic roles and workload policies

Specialisation of roles

In traditional universities, with traditionally structured roles, each academic carries out both teaching and research responsibilities. While there is evidence of synergies between postgraduate teaching and academic research, studies increasingly point to trade-offs between teaching and research and find no association between research productivity and teaching effectiveness (Hattie and Marsh, 1996[89]; Marsh and Hattie, 2002[90]).

In many research universities, there has been an increasing differentiation or disaggregation of roles, often between full-time, research-active staff with continuing appointments and modest teaching responsibilities, and those on fixed-term, often part-time, appointments with mainly (or exclusively) teaching duties.

Outside of research-intensive universities, such as in universities of applied sciences, polytechnics or colleges of higher education, the roles of academic staff may be weighted almost exclusively to teaching and engagement missions. In these sectors of higher education, part-time teaching may be prevalent, as part-time staff have outside jobs, and their professional experience contributes to the effectiveness of their teaching in occupationally oriented programmes

How academics allocate their time

A study in the United States shows that tenure and promotion influence the allocation of time: full professors spend more time on service activities (relative to teaching and research) and longer-term associate professors spend more time teaching than doing research. Women, on average allocate more time to service (engagement) and less time to research; this may be a contributing factor in the gender gap observed in salaries. In the United Kingdom, a study on the evolution of academic workloads, shows evidence that the biggest change has been the growing amount of time academics devote to administrative activities.

Some institutions hire faculty with the expectation that they will spend, say, 40 percent of their time on teaching, 40 percent on research, and 20 percent on institutional service (40-40-20). Other universities may have significantly different norms. Of course, institutions that don't consider research to be a key part of their missions will have higher teaching percentages.

This scheme works satisfactory in universities. However, recent developments suggest that improvements may be possible. They stem from an institution's desire to better understand what's actually expected of its faculty and more accurately align expectations. These involve the development of faculty workload models that refine the effort expectations for individual professors based on their planned assignments

Workloads are of increasing concern to faculty in many universities. Enrollment increases without commensurate new faculty FTEs (full-time equivalents) often are cited as problematic, but so is the faculty's own tendency to add courses and programs while seldom subtracting any. Leaders need to have serious conversations about stemming the tide or figuring out academically appropriate mitigations.

Experience shows that situations where calculated demand exceeds nominal supply by 20 or 25 percent are quite common. Such a relation usually means that the faculty's actual workweek is longer than the one assumed in the model (usually forty or forty-eight hours a week). Small discrepancies generally aren't cause for alarm, but larger ones may indicate unsustainable workloads or a shortchanging of research and service.

Digitalisation in learning and teaching

Digitalisation holds the promise of improved efficiency in learning and teaching by reducing the marginal cost of additional enrolments (Christensen et al., 2011[88]). It has the potential

to promote the quality of the learning experience and outcomes through the use of learning analytics, customisation and adaptation (Colvin, 2016[95]). Digitalisation can also widen access to higher education through increasing the diversity of the student population. At the same time, digitalisation creates the potential for reorganisation of traditional academic roles and responsibilities.

In practice, however, the impact of the use of digital technology in learning and teaching on cost, quality and academic work has been mixed. Introducing new technology does not necessarily lead to innovative and more effective practices, or reductions in marginal cost. Staff may adapt new technologies to traditional practice, or they may resist its implementation. Even eager and able adopters may be deterred by career structures and assessment systems that prevent them from making full use of its potential.

Many current online courses may be difficult for the students who are least prepared – precisely those students for whom online provision could extend educational opportunities the most; and they might be better off taking equivalent in-person courses.

Governments in several countries promote digitalisation in higher education, recognising its potential and also the challenges to its effective implementation; many are offering targeted funding for digitalisation initiatives, including the development of the digital skills of staff. Quality assurance agencies are adjusting their review standards to the digitalisation of learning and teaching, recognising that requirements regarding student-to-staff ratios and staff profiles may need to change. However, there is a concern that the uptake of technology in teaching, learning and innovation in pedagogy is still insufficient, and that design and delivery is still traditional in most countries.

Physical Resourcing (Infrastructure)

Course teaching draws on yet another important kind of resource: building and facilities, classrooms, laboratory space (machinery & tools), information sources (library and ICT either hardware and software), IP, experience, skills, and other kinds of facilities. The space inventories maintained nowadays by most universities supply the data needed to model these resources

The complete datasets needed might even include the enrolment capacities (numbers of seats) for different kinds of rooms, and the reported information for course instances could include these data where they are available. This would allow calculation of the percentage of seating capacity used by each course. The data come from the university's timetabling and student registration systems (not from accounting system). It highlights the trade-offs between quantities such as class size, duration, frequency, and replication, on the one hand, and faculty teaching loads, on the other.

Nowadays, classrooms have become a scarce resource in many universities, especially those that include special resources such as computer terminals and laboratory equipment.

Decisions about program size and curricula need to consider classroom availability in these situations.

Some room types are scheduled much more densely than others. Certain facilities are both in short supply and "owned" by particular schools that are reluctant to open them up for other usage. Class sizes may be constrained by seating capacity, or small classes may meet in rooms that do not lend themselves to effective teaching. If this weren't enough, new teaching modalities are changing the relationships between course delivery and facilities.

These situations can motivate a school to tap additional data sources, such as those available in learning management platforms, the IT department (online), and local academic department systems, so they can better understand the supply and demand for particular kinds of rooms.

2. Discussion

a. What policies is important in an increase of managerial staff in higher education relating to made universities more autonomous and have triggered by the changes that aim to make universities more adaptive, resourceful, and competitive in the disruption era?
b. Faculty efforts in support of higher education including teaching, research, and service (*Tridharma Perguruan Tinggi*) activities. What composition is the best to fulfil what's actually expected of its faculty and more accurately align expectations of the institutions?
c. How should one adjust a professor's teaching percentage when she serves as principal investigator on a large sponsored project that requires significant work during the academic year? Similar issues arise on the teaching side. Should the percentages be revised when a professor teaches a very large or complex course, for example? How should the percentages be changed when professors teach an "overload" of small courses

3. Cases and exercise

Divide participants into groups. Hand out pre-prepared material containing case studies which describe about resourcing management. Encourage participants to study these different situations and to identify the causes of the case described. Ask them to decide from which angle the issue could best be tackled and allow them to elaborate on possible solutions for these situations.

Case A

Suppose the budget staff of a university or one of its schools is considering the impact of admitting more studentpps. Other things being equal, they know this action will increase class sizes. Some elements of teaching (e.g., feedback and grading of essays) would require more time or else get short changed. Mitigating this would mean other course activities would receive less effort, a boosting of the use of adjunct faculty, or increases in the regular faculty's workload—which would reduce their discretionary time. What will be the quantitative consequences for teaching operations if we make a certain choice, and then

what will be the resulting qualitative consequences? Would this impact be acceptable, or does the university need to increase faculty numbers or radically change the teaching paradigm?

Case B

Suppose we need to decide whether the teaching material is delivered face-to-face, online, or in some kind of blended format. These may be driven by shifts in the external environment: for example, in government policy, in student demand from a particular country or in a particular student major, or due to an especially disruptive technological change. How decisions about mode are driven by staff and physical resources? As in all analyses of the cost of online versus in-person teaching, the matter of learning quality should be considered carefully. It may be desirable, for example, to get data on group or class sizes, teacher types, and other detailed course attributes

3. Reflection and Evaluation

- Participants fill in the reflection form as an evaluation of the mastery of the training material
- Participants provide feedback on the implementation of the Module 2 session.