

Examining the Key Components of Faculty Development to Advance Japanese Higher Education: A Qualitative Study

Satoshi Ozeki ^{*}, Toru Hayashi [†], Masa Fukano [‡],
Shinichi Yamazaki [§], Andrea L. Beach ^{**}, Mary Deane Sorcinelli ^{††}

Abstract

Establishing an effective management system for teaching and learning is an urgent challenge for quality assurance and enhancement in Japanese higher education. Faculty development (FD) plays a key role in improving the human resources directly responsible for educational quality. This paper discusses how FD should evolve to advance Japanese higher education. Specifically, it presents the results of a qualitative study examining future directions of FD in Japan. A content analysis of the opinions of people in charge of FD was conducted to reveal the essential components for advancing higher education. Our analysis identified various critical themes on how FD should be undertaken, along with improvement-related themes, that refer not only to faculty teaching skills but also to program- and institutional-level management. The results suggest that FD must be optimized systematically within an institution in collaboration with other institutions, using technologies such as e-learning systems. Lastly, measures should be taken to create sustainable and meaningful FD activities in Japanese higher education.

Keywords: Faculty development, Japanese higher education, content analysis, qualitative study, faculty evaluation

1 Faculty Development in Japanese Higher Education

1.1 Quality Assurance in Japanese Higher Education

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan has developed educational policies to maximize student learning outcomes to meet society's needs for human resources. Recent policies in Japan have focused on the qualitative transformation necessary for learner-oriented education [1]. In 2018, the Central Council for Education of Japan

^{*} Asahikawa Medical University, Asahikawa, Japan

[†] Kanazawa University, Kanazawa, Japan

[‡] Osaka Metropolitan University, Osaka, Japan

[§] J. F. Oberlin University, Machida, Japan

^{**} Western Michigan University, Kalamazoo, USA

^{††} University of Massachusetts Amherst, Massachusetts, USA

released, the “Grand Design for Higher Education toward 2040” (hereinafter, Grand Design). It depicts the future concept of Japanese higher education, emphasizing the need to strengthen quality assurance based on three policies: admission (a clear student selection process), curriculum (a curriculum strategy to attain learning outcomes), and diploma (a specification of required learning outcomes for graduation) policies [2]. Each institution in higher education must establish these three policies and manage teaching and learning based on them to ensure that students achieve the learning outcomes stated in the diploma policy.

To achieve learner-centered education as described in the Grand Design, the University Subcommittee of the Central Council for Education of Japan further released in 2020 the “Guidelines for Management of Teaching and Learning.” These guidelines define the management of teaching and learning as “the management and operation of universities to accomplish their education objectives” [3]. It is considered a key operation for internal quality assurance, where each university voluntarily evaluates its various activities and improves them based on the evaluation. The essential components of these guidelines are shown in Figure 1.

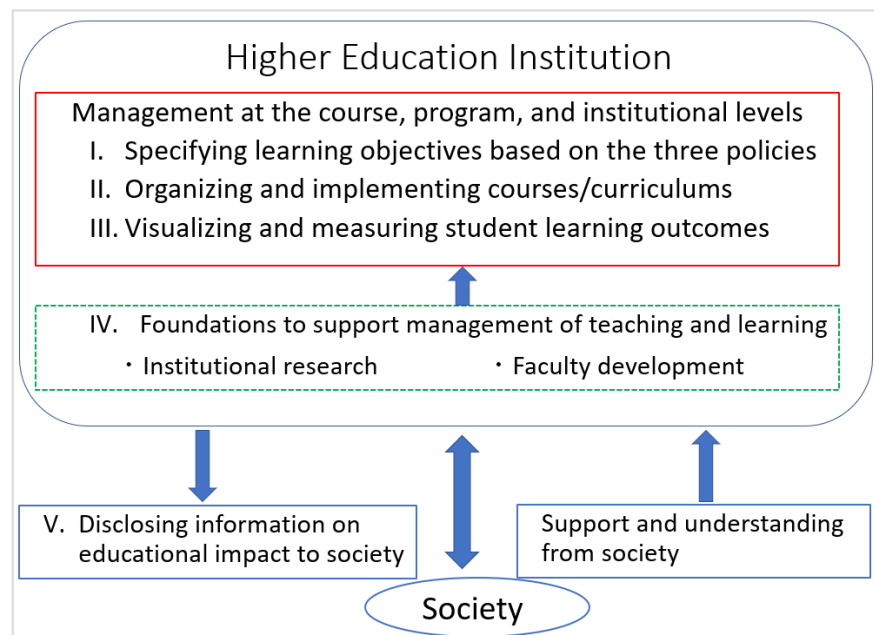


Figure 1: Key Components of the Guidelines [3]

These guidelines emphasize the importance of managing education based on the three policies and encourage higher education institutions to improve their management systems to realize learner-oriented education. To accomplish this goal, visualizing the learning outcomes stated in the diploma policy as the ultimate outcome of a degree program is a key factor. An assessment plan should be put in place to conduct an appropriate assessment of the learning outcomes. Program curricula must be organized based on assessment results. Items I to III in Figure 1 must be considered in the context of the course, program, and institutional levels to establish effective management of teaching and learning.

There are two essential foundations for supporting the management system to maximize student learning gains. The first is institutional research, which contributes to the system by providing student or institutional data, whereas the second, faculty development (FD), can function as

an agent to improve the human resources needed to realize learner-oriented education. In addition to improving quality assurance, each institution is encouraged to disclose information regarding their educational impact on society for accountability purposes. In return, higher education can receive more support and understanding from society. Institutional research has gained much attention in recent years as evidence-based educational management is required. However, there is relatively little focus on FD, the other essential foundation for supporting the management of teaching and learning.

1.2 Status of FD in Japanese Higher Education

In Japan, the “Standards for University Establishment” were modified in 2008, mandating that FD be conducted at Japanese universities. There is no agreed-upon definition of FD; in a narrow sense, FD can be defined as “the general term indicating organizational initiatives to improve and advance faculty’s teaching methods and contents” [4]. It can also encompass the development of various university functions such as research, teaching, social services, management, and self-inspection and evaluation of these functions and related faculty [5]. FD activities can be contextualized based on the three levels of higher education: micro, middle, and macro [6]. FD activities at the micro level are concerned with individual teaching development, while middle-level FD includes activities dealing with curricula and degree-level development. Those at the macro level target issues on the whole higher education institution, such as organizational development and structural changes. Expanding on the three levels of FD, the multi-layer FD framework was proposed in 2015 [7], whereby the scope of FD was extended to faculty for skills other than teaching such as research, management, social contributions, also encompassing the society and its stakeholders outside the university.

The importance of FD has been highlighted in policy-related papers in Japan for more than a decade [4][8]. Recently, its significance was reemphasized in 2020, particularly in the context of teaching and learning [3]. There is greater emphasis on implementing FD that aligns with educational goals in the management cycle of teaching and learning. As Figure 1 suggests, by contributing to improvements in the course, program, and institutional levels of higher education, FD can provide an essential foundation for ensuring and improving student learning outcomes. As such, it is important to design carefully an FD system within each institution to meet its specific needs.

MEXT annually implements a nationwide survey for all universities in Japan to gauge the progress and status of educational reforms at each of them. According to the latest survey released in 2021 [9], as of the 2019 academic year, 77% of Japanese universities, have an organization that promotes FD internally, whose main roles include the improvement of educational content and methods (59%), development of educational programs and systems (22%), and evaluation of the faculty’s educational activities (11%). It was also reported that institutions offered FD activities such as lectures or symposiums (62%), peer class observations and evaluation (53%), and workshops (50%) to improve educational methods. Additionally, another nationwide survey conducted in 2015 identified a large variety of FD approaches and methods employed at Japanese universities [10]. With its mandated implementation, the overall results indicate that FD has become integrated into Japanese higher education. However, little is known about how FD should be conducted to advance Japanese higher education further.

1.3 A Quantitative Text Analysis on which the Present Study is Built

A study was conducted to explore the opinions of faculty developers (FDers) regarding the directions that FD should take in Japanese higher education [11]. This study analyzed the responses of 221 FDers to the open-ended question: “Which directions do you think the field of FD should take in the next decade?” A quantitative text analysis using a KH coder was performed to identify frequently used words and discover potential themes in the responses. The KH coder is an open-source software used to perform computer-assisted qualitative text mining and can explore text data from a quantitative perspective [12]. The analysis by the KH coder yielded a list of the top-appearing words and a word co-occurrence network that can identify patterns of word associations based on the connectivity of the words, leading to the discovery of potential themes in the responses.

The top 60 frequently used words are listed in Table 1. The most frequently used word was “FD” (frequency: 152), followed by “activity” (126), “faculty” (120), “university” (117), “education” (115), “student” (75), “class” (63), “consider” (60), “progress” (56), “necessary” (46), and “improvement” (44).

Table 1: Top 60 Words (Excerpt from Ozeki et al. [11])

Words	Freq	Words	Freq	Words	Freq	Words	Freq
FD	152	Do	31	Implementation	17	Share	11
Activity	126	Society	24	Correspondence	16	Teaching	11
Faculty	120	Method	24	Active learning	15	Support	11
University	117	Development	23	Department	15	Content	11
Education	115	Research	23	Whole	15	Effect	10
Student	75	Awareness	21	Reform	14	Afterward	10
Class	63	Participation	20	Training course	14	Staff	10
Consider	60	Individual	19	Problem	14	Diversity	10
Progress	56	Quality	19	Creation	13	Offer	10
Necessary	46	Outcome	19	Recognition	13	Change	10
Improvement	44	My university	19	Curriculum	12	Purpose	10
Assessment	41	Program	18	Challenge	12	Understanding	10
Heighten	36	Learning	18	Effort	12	Cooperation	10
Organization	34	Faculty and staff	18	Important	12	Needs	10
Think	33	Capability	18	Establishment	11	Questionnaire	9

Note. Freq = frequency

The word co-occurrence network generated by the KH coder is shown in Figure 2. Based on a semantic analysis, the size of the circle indicates the usage frequency of a word: the larger the circle, the more frequently the word was used. The words used together were placed close to each other. The word co-occurrence network identified nine subgroups of associated words circled in dotted lines, indicating nine potential themes in the responses.

The largest theme includes words such as “FD,” “university,” “education,” “faculty,” “student,” “heighten,” and “progress,” suggesting that FD activities should aim to help faculty or a university improve student success. This indicates the overall importance of improving education for students so they can contribute to society through university education. Another word association, including “active learning” and “effort,” may indicate an FD theme of supporting teaching at a faculty level by enabling teachers to learn and use effective teaching strategies such as active

learning, interactive teaching and off-campus study. The same theme was found in another word association including “method” and “creation.”

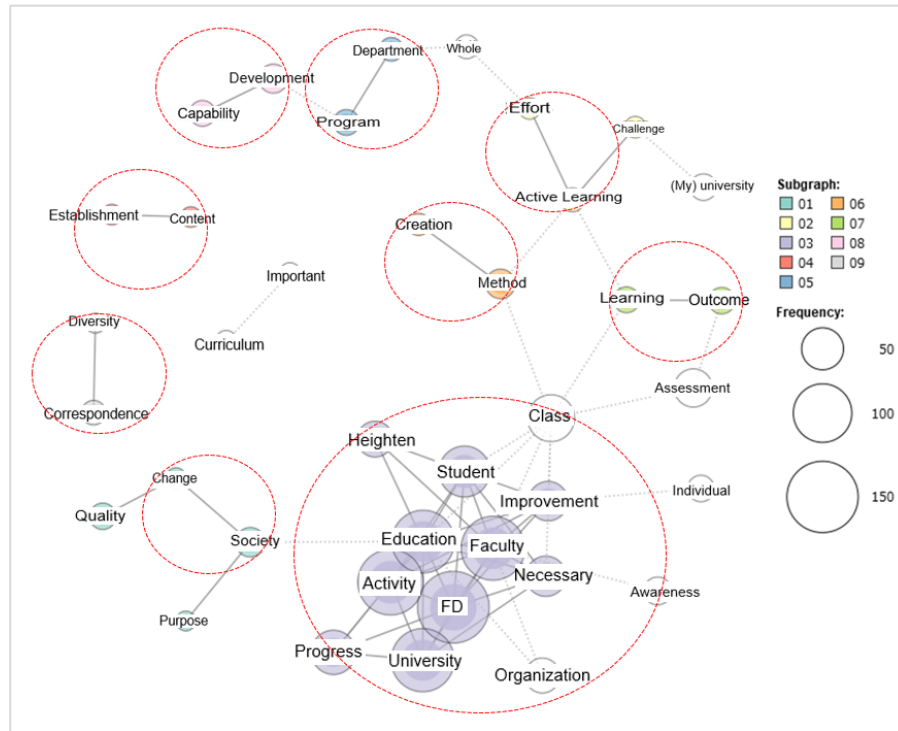


Figure 2: The Word Co-occurrence Network (excerpt from Ozeki et al. [11])

The word association, including words such as “learning” and “outcome,” may have two different themes. One theme indicates improving the faculty’s ability to measure student learning outcomes. The theme suggests the importance of organizational efforts to develop faculty’s educational capabilities in order to offer courses based on diploma policies and assess learning outcomes properly. The other theme potentially suggests assessing the impact of FD and investigating methods to incorporate it into the overall management of teaching and education. Furthermore, FD should not only support teaching at the faculty level, but also extend to the program level. The word association, including words such as “program” and “department,” suggests that FD should deal with issues at a program level, such as assessing program-level learning outcomes and helping students achieve them. The scope of FD should be further extended to an institutional level to advance education in a way that aligns with a university’s missions and vision.

In light of other areas of FD, the associated words “capability” and “development,” may indicate that FD should target faculty skills other than teaching such as research, management, and leadership abilities. Another important theme identified by the word co-occurrence network with words such as “society” and “change,” suggests FDe’s awareness of their needs to respond to societal changes. Similarly, a theme involving the words “correspondence” and “diversity” suggests that FD should be developed to address the needs of a diverse student population, as the basic academic skills of students may become diverse as well.

The results of the quantitative text analysis revealed potentially important themes in the directions of FD in Japanese higher education. However, in-depth analysis is necessary to explore further the specific directions FD should take and identify the types of contributions that it should

make. Additionally, it is important to investigate whether future directions align with the educational policy trends of Japanese higher education.

2 Methods

2.1 Purpose

Building on Ozeki et al. [11], this study further examines FDers' opinions on FD and the key components that can contribute to the advancement of higher education. To this end, a text content analysis was conducted on FDers' responses to the open-ended question about the directions they believed the FD field should take in the next ten years. To cover a variety of potential themes in the responses, FD in this study refers to any development involving not only the faculty's roles and responsibilities, but also other university personnel and stakeholders concerned with improving any aspect of higher education. The questions investigated in this study were as follows:

1. What are FDers' opinions about FD's contributions to Japanese higher education?
2. How do they think FD should be advanced in Japanese higher education?

2.2 Procedure

2.2.1 Sample

Part of the results from a larger study that examined the state of FD in Japanese higher education were used here (interested readers may refer to Yamazaki et al. [10]). A questionnaire to examine various aspects of FD at universities in Japan was administered in the larger study, where a sample was drawn from all Japanese universities. Representatives of 367 universities responded to it and there were 221 responses to the open-ended question, "Which directions do you think the field of FD should take in the next decade?" The university type and primary title of the respondents ($n = 221$) are summarized in Table 2. The current study, an extension of Ozeki et al. [11], analyzed the same data used in the previous study.

Table 2: Characteristics of Respondents (Excerpt from Ozeki et al. [11])

University type	n (%)	Primary title	n (%)
National	32 (14.5)	FD Director	110 (49.8)
Public	25 (11.3)	Associate/Assistant director	1 (0.5)
Private	163 (73.8)	Faculty member	14 (6.3)
Unknown	1 (0.5)	Senior-level administrator	18 (8.1)
		Program coordinator	15 (6.8)
		Technology staff	17 (7.7)
		Other	46 (20.8)

2.2.2 Data Analysis

Based on the FD frameworks provided in the policy-related papers and the literature review discussed previously, category development was conducted in consideration of learner-oriented education and the three levels of higher education: course (individual faculty), degree program, and institution. The overarching mission of Japanese educational reform is to shift to learner-oriented

education [2]; hence, FD directions referring to students were placed in a separate category from the categories for the three levels. Additionally, categories for directions on how FD should be conducted were developed based on the second research question, which were later grouped into two types. The potential themes identified from the previous quantitative text analysis were also considered.

A content analysis was conducted to sort responses into categories and identify their relevant subcategories. For this purpose, the standard procedure presented by Krippendorff [13] and Creswell [14] was applied. The first author mainly coded the responses in consultation with the second, third and fourth authors. All responses were first organized in Excel and read thoroughly. Afterwards, several responses were coded, and their coding results were checked by the other authors to ensure the validity of the coding process. Then, the remaining responses were coded and assigned to appropriate categories. Next, all the responses were sorted by category and each of them was read carefully again to identify similar meanings within each category and further sorted into subcategories. Exemplar codes to illustrate the subcategories were also identified. To ensure and improve the validity and reliability of our content analysis, all the coded results were shared among all four authors multiple times whenever necessary, and consultations were sought accordingly to resolve any coding disagreement. Lastly, the final coding results were shared among all the authors with expertise in higher education and FD. The identified categories and subcategories are summarized in the Results section (Table 3).

3 Results

3.1 Summary

Making use of the previous literature and based on the research questions, our content analysis identified five broad categories of FD directions. The first category refers to students, while the second to fourth categories concern the three levels of higher education, that is faculty, degree program, and institutional levels. Our analysis also identified two categories related to how FD should be conducted in terms of its characteristics and implementation issues.

Table 3: Summary of the coded results

Category	Subcategory	Code examples
1. Students	1.1. Benefits to students	“Meet the students’ needs” “Develop educational methods to improve students’ understanding”
	1.2. Student involvement	“Enhance students’ awareness of their own performance level” “Increase students’ motivation to study”
2. Faculty	2.1. Teaching	“Improve teaching skills” “Improve quality of education at the course level”
	2.2. Faculty attributes	“Develop research and management skills” “Improve faculty quality”

	2.3. Faculty involvement	“Changes in faculty’s awareness toward the need to improve teaching process” “Raise faculty’s awareness of their issues in education”
3. Program	3.1. Curriculum, Program goals	“Program-level FD initiatives” “Target program-level issues”
4. Institution and beyond	4.1. Benefits to institutions	“Improve the whole institution” “Advancing FD supports the missions of the institution”
	4.2. Communication within institutions	“Share educational methods and exchange information on FD” “Provide a platform to discuss teaching”
	4.3. Various stakeholders	“Consult stakeholders within and outside the university” “Consider educational reforms in high school”
5-A. Characteristics of FD	5.1. Voluntary and meaningful activities	“Not just to maintain university accreditation, but to actually improve teaching” “Conduct FD activities voluntarily”
	5.2. University-specific	“FD tailored to the needs of each university” “FD corresponding to university characteristics”
	5.3. Promote faculty awareness and interest	“Improve the understanding of FD” “Increase faculty’s interest in FD”
	5.4. Alleviate burden on faculty	“Reduce burdens of FD on faculty” “Secure adequate time for teaching and research”
5-B. Implementation of FD	5.5. Target audience	“Make FD mandatory for all faculties” “Have staff and students receive development programs”
	5.6. Collaboration within the institution	“Conduct FD cooperatively with staff and students” “Incorporate students’ perspectives”
	5.7. Delivery approaches	“Practical workshops” “Develop online systems”
	5.8. Collaboration with other institutions	“Partnerships between universities” “Broadcasting of FD content nationwide”
	5.9. Resource challenges	“FD requires financial and human resources” “Limitations in budget and staff for FD”

5.10. Systematization	“Linking FD to an educational system” “Make organizational efforts to incorporate FD into faculty evaluation”
5.11. Impact assessment	“Assessing the effectiveness of FD” “FD activities based on evidence”

3.2 Category 1: Students

The first category centers on learner-oriented education. FD should be advanced to improve student education. The following quotations illustrate subcategory (1.1): “Developing educational methods to improve students’ understandings and achievements” and “Promoting educational methods that can meet students’ needs.” Another relevant quotation is “The more the population of college-aged students decreases and the more diverse their basic academic skills become, the greater the necessity for the faculty to enhance their teaching skills and educational capabilities at higher education.” This statement points out the importance of higher education in serving diverse student populations.

FD also needs to raise students’ willingness to study on their own. Regarding subcategory (1.2), the quotations “I think that FD activities leading to changes in the awareness of not only faculty but also of students are needed” and “Developing an educational program that nurtures students’ autonomy and motivation to study” indicate the necessity to target student awareness of their studies and motivate students to become autonomous learners.

3.3 Category 2: Faculty

The second category targets faculty’s teaching methods and other qualities and skills. Three subcategories were identified: (2.1) teaching, (2.2) faculty attributes, and (2.3) faculty involvement.

Subcategory 2.1 relates to improving the faculty skills for a successful course management, including teaching methods and assessment. FD should directly meet the faculty’s needs to improve teaching skills, as reflected in the statements, “I think we have to consider effective FD activities expansively such as active learning, interactive teaching, and off-campus study” and “We have to create various teaching and learning methods.” Subcategory 2.2 relates to developing the faculty’s other qualities and skills besides teaching, such as research and leadership development: “We should consider FD activities for developing not only teaching skills but also research and management abilities” and “I think that FD should be expanded in a well-balanced way not only in education, but also in research, management, and social contributions.” Because faculty members are required to take various roles in university management, it is important for them to develop the necessary skills. Subcategory 2.3 is about raising the awareness of the faculty members, who are responsible for student learning outcomes and research activities, and their willingness to acquire the necessary skills. Such awareness will lead to voluntary involvement and willingness to engage in FD activities, as reflected in the quote, “I think that FD activities should target developing the awareness of the faculty members and researchers with regard to various aspects of the faculty that could encounter issues.”

3.4 Category 3: Program

The third category concerns development at the degree program level (3.1). FD should not only

support teaching at the faculty level but also target program-related issues such as improving curricula and program-level learning outcomes: “From now on, I think we should expand FD activities to the reforms of academic programs and curriculum design of departments” and “There should be more increases in independent, program-level FD initiatives as well as in those at the institutional level.” These opinions indicate that FD should address issues specific to a particular academic program to improve program-specific learning outcomes and their assessment.

3.5 Category 4: Institution and Beyond

The fourth category relates to further expanding the scope of FD to the institutional level, and the entire university community and beyond as well, with subcategories concerning the benefits to institutions (4.1), communication within institutions (4.2), and various stakeholders (4.3).

Comments such as “We should establish FD as a systematic program that is not only at an individual faculty level but also involves the discipline of study, department, and institution-level efforts” and “We have to devise plans to develop the educational capability of the college, and progress to implement more and more” suggest that FD should be considered from the perspective of the entire university setting (4.1). Furthermore, FD can provide communication platforms within an institution (4.2), which is reflected in quotations such as the following ones: “As university education faces a turning point for reforms, there is a need to reconsider the basis of education. As such, we need to have a shared understanding through FD” and “We should have opportunities to discuss freely the issues that each of us faces.” FD can also incorporate stakeholders from outside the university community (4.3). The quotation, “FD should advance into activities that use evaluation and feedback from different stakeholders such as parents, high school officials, and members of society” indicates that, in the future, FD may need to reflect the opinions of various stakeholders besides faculty, staff, and students.

3.6 Category 5-A. Characteristics of FD

Qualitative data on the second research question were divided into two parts. The first part (5-A) focuses on the characteristics of FD, whereas the second part (5-B) mainly concerns its implementation and target participants. In 5-A, our analysis identified the following features of FD: voluntary and meaningful activities (5.1), university-specific (5.2), promotes faculty awareness and interest (5.3), alleviates burden on the faculty (5.4).

First, our analysis revealed that FD must be conducted voluntarily and meaningfully (5.1), as indicated by responses such as “FD should develop into activities that are attractive and significant, enabling the faculty to change their awareness of FD from something that they are forced to attend into something that they are willing to participate in” and “FD should be conducted not for accreditation but voluntarily and intrinsically.” Furthermore, FD should be advanced in a way that aligns with the missions and goals of each institution (5.2), as noted in the comment “I think FD should correspond to the university’s characteristics.” Specifically, the comment “Under the leadership of the President, we should promote practical FD activities that clarify the visions of the individual university” indicates that FD should be able to promote the university’s missions and visions among the institution’s entire community.

FD should also be advanced so that the faculty will become more aware of its importance and have greater interest and willingness to participate in its activities (5.3). The opinion, “FD should

be developed into activities that all faculty members understand and collaborate on as a university-wide initiative” illustrates this point. Meanwhile, there were some concerns that FD places extra burden on the faculty, who are already busy with their various duties (5.4): “FD should be further developed after establishing the situation where the faculty can put their efforts exclusively into teaching and research activities by creating stable university management and reducing faculty involvement in administrative work.” This indicates that FD should be conducted without interfering tremendously with the faculty’s teaching, research, and service loads.

3.7 Category 5-B: Implementation of FD

Category 5-B centers on themes related to the implementation of FD, including its target audience (5.5), collaboration within the institution (5.6), delivery approaches (5.7), collaboration with other institutions (5.8), resource challenges (5.9), systematization (5.10), and impact assessment (5.11).

First, statements such as “FD should be developed as a platform where more faculty members, not only a particular group of them, will be able to learn educational methods that they can incorporate into their classes” and “Developing FD involving staff and students,” mean that FD should not only reach more faculty members but also be extended to staff and students (5.5). FD should also be organized in collaboration with staff and students (5.6), as expressed in this opinion: “FD should be conducted in collaboration between faculty and staff with student involvement. To realize this, I think it is necessary to shape for the university community a culture that promotes conversations about FD activities on a daily basis.”

Furthermore, a variety of FD approaches, such as workshops, hands-on seminars, and active learning, need to be developed to improve practical teaching skills and the convenience of easy access to FD materials by means of e-learning systems (5.7). This subcategory is illustrated by the statements “FD activities that center on hands-on workshops to realize classes that correspond to a new learning perspective [are desirable]. It is a fact that there are many faculty members with great research achievements but are poor at teaching students about them” and “[Faculty can] receive FD programs without coming to campus using e-learning systems.” In addition to devising different FD approaches within an institution, the comment “I hope a university network can be established where universities [that are] well-advanced in FD provide their contents online for other Japanese universities to improve their faculties’ level. Working on FD together as one whole university community will be more effective and efficient” suggests that there should be more collaboration within the national university community to develop a network for shared FD materials (5.8).

Subcategory (5.9) concerns organizational issues surrounding FD, such as a lack of specialists and budgets. It is ideal for an FD specialist to take care of FD activities to reduce the burdens of FDeers who have other major roles. However, there are limitations in budgets and human resources for FD. The statement “It is desirable to develop specialized FD staff and create a career path for them. However, it is not easy for small universities like ours to secure budgets for indirect sections such as FD” articulates this point. Another organizational issue revealed by the analysis was the systematization of FD within an institution. To make FD meaningful and practical, more organizational efforts are needed for FD to be incorporated into the educational system and possibly a faculty evaluation system. (5.10). The opinions that “A systematic FD program must be established where FD is connected with human resources policies including a tenure-tracking

system to promote some type of a certificate system needed to become a faculty member (not to mention an official teaching license system as well)” and “The institution, as an organizational effort, will decide on the FD themes about qualities that faculty should possess and implement, instead of faculty deciding their own FD themes” point out the necessity of institutional efforts toward FD. In addition, the comment “As a strategy to progress steadily into the directions of FD as an organizational effort, incorporating FD into a faculty evaluation system should be considered” sheds light on the importance of contextualizing FD in an educational system. Lastly, subcategory (5.11) suggests the necessity of assessing the impact of FD, as expressed in the following opinions: “It becomes important to consider whether the results of the FD activities are actually reflected in the quality of graduates” and “The effectiveness of the FD should be visualized through its outcomes. We should stop FD that is self-satisfying without any actual results.” To make FD sustainable and meaningful within an institution, there should be strategies for systematizing FD based on evidence.

4 Discussion

Extending the previous quantitative text analysis [11], this study further analyzed text data regarding the future direction of FD in higher education. Our content analysis identified five main emerging categories and 20 subcategories in the FDeers’ opinions regarding the directions that the FD field should take in the next ten years. The content analysis identified not only categories related to the three levels of higher education, but also those essential in considering how FD should be undertaken in order to make meaningful and sustainable contributions to Japanese higher education.

4.1 Contributions of FD that Align with the Guidelines (Research Question #1)

The importance of FD has been discussed over the decades in the Japanese higher education environment [4][8], and its interest was revitalized in the most recent policy-related paper [3]. FD was identified as an indispensable component for the effective management of teaching and learning, which will contribute to the realization of learner-oriented education. Specifically, the “Guidelines for Management of Teaching and Learning” recommended that FD target the course, program, and institutional levels of educational management. Our analysis suggests that FDeers were well aware of the contributions that FD could make toward these three levels before the guidelines were released in 2020.

First, FD should be advanced to address the challenges faced by faculty members. FD can support faculties in adopting student-centered teaching approaches, such as active learning and interactive teaching, as well as improving classroom assessment practices. Additionally, faculty support should be extended to the faculty’s other contributions such as research and management. It is important that FD be considered from the perspective of learner-oriented education and be developed to enhance student learning outcomes. To accomplish this goal, it is crucial for FD to become sensitive to student and societal needs and respond to them in a timely and appropriate manner. It seemed that respondents were aware of the changing landscape in Japanese higher education given social changes such as a decreasing college-aged population and a diverse student population. FD activities may also need to develop students’ awareness of their performance to increase their motivation.

Second, our analysis indicates that FD can improve higher education at different levels to enhance student learning outcomes. FD should be advanced in ways that support not only individual faculties but also assist in assessing program curricula and improving institutional-level management of teaching and learning. Thus, FD can be recognized as an important component of the university community. FD activities to be conducted at an institution need to be carefully considered as organizational efforts to improve the management system of teaching and learning for students in an effective manner.

4.2 Directions that FD should take in the Future (Research Question #2)

In addition to the categories related to the three levels of higher education, there are other important directions for FD. First, our analysis revealed themes related to how FD can be sustainably conducted with limited financial and human resources. With an expected large decline in the college population and decreasing budgets in Japanese higher education institutions [2], it will be more difficult to secure sufficient financial and human resources exclusively for FD. FD needs to be designed within an institution in a way that considers a tight budget and the expanded busy roles of the faculty members. Thus, effective methods for implementing FD must be devised.

As our analysis identified, future FD will need to depend more on the use of technology in collaboration with other institutions to make high-quality FD content available to any university. The recent influence of the COVID-19 pandemic may have a significant impact on this initiative. Although FD should be tailored to the needs of each institution [15], shared FD programs can be used to tackle general issues in the higher education sectors and act as a starting point for such an individual customization. This will enable higher education institutions to respond to collective demands from the government and society while fulfilling their specific needs. Potential implementation issues must be anticipated because society is rapidly changing, as is the situation surrounding the higher education. Sharing high-quality FD activities within the national university community can also alleviate the burdens of FDeers and the faculty, an important theme identified in our analysis.

Second, some respondents raised an important issue in assessing the outcomes of FD. To establish effective management of teaching and learning, FD needs to be evidence-based, and its impacts should be measured in order to integrate FD into the management system of teaching and learning. Although measuring the effectiveness of FD on faculty teaching practices is a tremendous challenge [16], it is crucial for FD itself to yield sufficient evidence to demonstrate its effectiveness and capabilities in serving various aspects of higher education. Although some evidence for the effectiveness of FD has been reported in Japanese higher education [17], more research is needed to accumulate sound empirical evidence. This way, FD can become an integrated part of the P (plan), D (do), C (check), and A (action) systems that contribute to continuous improvements in higher education. Internationally, large-scale studies on FD have been conducted in the United States [15][18]. Such a study is required in Japan as well to provide solid evidence of the effectiveness of FD. Implementing thorough FD programs to improve teaching can lead to better student outcomes [19].

Lastly, it is important to explore and develop new teaching evaluation approaches to advance educational practices further. It is worthwhile to consider the integration of FD into a faculty evaluation system. A comprehensive and fair evaluation of faculty performance is critical, as Japanese universities work to enhance student learning outcomes and success. We recommend a

faculty evaluation system that measures the teaching contributions of a faculty as well as research and management activities, leading to a work environment that motivates the faculty to improve education [3]. To accomplish this goal, the next step is to clarify faculty roles and responsibilities, as Japanese universities tend not to provide clear job descriptions [20]. Without such clarity, it is difficult to evaluate the faculty's work and provide constructive feedback on why and how they need to improve their teaching. With a greater sense of what a faculty has to do for students, FD can play an essential role in supporting evidence-based teaching evaluation practices.

4.3 Limitations

This study had some limitations. First, the analysis was conducted in Japanese; the quotes and the top 60 most frequent words presented in this study might have different meanings because a one-to-one correspondence between Japanese and English words does not always exist. The translation from English to Japanese was carefully conducted and checked by multiple researchers. Second, this study was conducted in 2015, therefore before the recent changes brought in by the COVID-19 crisis. The results would have been different from the collected responses if it had been conducted in the middle of or after the pandemic. Finally, there was a potential bias in our content analysis. To reduce bias and sustain objectivity, the results of this analysis were frequently shared between the authors and reconfirmed multiple times.

However, despite these limitations, this study provides important insights into the directions of FD in the Japanese higher education. Future research is required to investigate faculty needs post-COVID-19 and to identify specific FD activities that can assist in improving faculty's teaching skills and institutional capacities to realize the learner-oriented education depicted in the Grand Design of Japanese higher education. In addition, it is crucial to establish effective methods to measure the impact of FD and connect FD activities with a faculty evaluation system. In this way, FD can be fully integrated into a comprehensive teaching and management system for student learning outcomes.

5 Conclusion

Our content analysis revealed that FDeers in the Japanese higher education are aware of their essential contributions to advancing learner-oriented education. They recognize the need to support the assessment of student learning at the individual faculty, program, and institutional levels to establish the effective management of teaching and learning. FDeers are also well aware of the importance of responding to societal and student needs. Additionally, they acknowledge the need to consider FD implementation issues to sustain their activities with limited resources. It is imperative to measure the impact of FD for it to become an integrated part of teaching and learning management. To advance educational practices further, it is worthwhile to consider the development of a comprehensive evaluation system that measures teaching contributions, as well as research and other services, of faculty, leading to a work environment that motivates faculty to improve education. By integrating FD into an evidence-based educational system, FD can become a powerful vehicle for empirically advancing higher education.

Acknowledgment

This work was supported by JSPS KAKENHI Grant Number JP 20K18839.

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