

Revisiting higher education: Identifying the support needs of fractional academic staff teaching online

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Abstract: Fractional, or part-time teachers, commonly referred to as 'tutors,' have long been integral to higher education worldwide. Today as more and more universities are switching their educational modes to online and hybrid teaching and learning, a consequence of post Covid-19, the necessity to hire more online fractional academic staff has become even greater. However, for decades their role is often neglected, and they frequently lack the support required to fulfil their teaching responsibilities effectively. In the context of Malaysia, to date very limited empirical finding is available that investigates the support needs of fractional academic staff teaching online. The study reported in this paper is part of a larger study on higher education professional development among adjunct faculty. Understanding the needs of one of the largest faculties can offer valuable insights for enhancing the quality of online education. The main purpose of the study was to explore the support needs of fractional academic staff teaching online as perceived by the tutors themselves. The study adopted a mixed-method research design, utilizing questionnaire for quantitative approach followed by focus-group discussion as the qualitative approach. To understand if tutors were significantly more interested in one form of support to another, a Kruskal-Wallis ANOVA analysis was used. As for data obtained through focus-group discussion, thematic analysis was applied to identify most important and least important topics. The findings of the study revealed that fractional staff teaching online required four support needs, namely, professional support which included continuous online training programmes and seminars, structured operations and organizations that provide well-defined job descriptions related to their teaching roles, better recognition for their valuable contributions as well as better facilities by providing equitable workspace facilities. This study has crucial implications that suggest a need for a more inclusive and supportive approach to managing and developing fractional academic staff, particularly those involved in online education.

Keywords: Fractional academic staff, Higher education, Online teaching, Support needs.

1. Introduction

In recent years, studies on globalization continue to emphasize the pervasive influence of neoliberal principles on organizational practices and management strategies worldwide (Currie et al., 2000). Today, the impacts of COVID-19 have further transformed the economic and social ethos. One of the major revolutions as a result of COVID-19 can be witnessed within the education ecosystems (Diaz-Infante et al., 2022). Education systems today are becoming increasingly borderless as they expand their teaching and learning offerings. With the induction of the 'new normal,' many universities have shifted their program offerings towards hybrid and online structures, leading to a surge in student enrolment due to the inherent accessibility and flexibility of these programs (Dhawan, 2020; Lederman, 2020).

Consequently, universities are experiencing a rise in the employment of fractional academic staff, employed on a part-time basis throughout the teaching period (Martini, 2024). These staff members are compensated either hourly or on a contractual basis, reflecting the evolving landscape of higher education employment (Kezar & Sam, 2011; Knight et al., 2021).

As universities increasingly employ more fractional staff to accommodate the growing student population, it is essential to recognize that these staff members, alongside permanent employees, play a vital role in student learning within higher education institutions.

2. Literature Review

2.1. Understanding The Term 'Fractional Staff'

Fractional employment is an emerging and increasingly popular work arrangement. It involves hiring employees on a part-time basis, allowing organizations to engage staff for specific projects or tasks without the need for long-term commitments. Also referred to as adjunct, part-time, temporary, or contractual employment, this approach offers flexibility for both employers and employees (Pragna Solutions, 2023; Macfarlane, 2010; Tomkinson, 2013).

2.2. Professional Development

Professional development is a 'relatively young "science" within education' (Sparks and Loucks-Horsley, 1989, p.54) and has emerged as an area of study and research over the last few decades. Many journals and books dedicated to this area has been extensively written and some of these include those by Sparks and Loucks-Horsley (1989), Guskey (1998, 2000), Elliot (1991), Fullan and Hargreaves (1992), Fullan (1993), Darling-Hammond (1994), and Day (1999). These writings are recognized as some of the early works which have contributed to the emergence of various but almost similar definitions of professional development.

Sparks and Loucks-Horsley (1989) as one of their earliest studies have defined professional development as "...processes that improve the job-related knowledge, skills or attitudes of school employees" (, p.41). Approaching twenty-first century, Guskey (2000), a rather known theorist of teacher change refers professional development to 'those processes and activities designed to enhance the professional knowledge, skills and attitudes of educators so that they might, in turn, improve the learning of students' (p.16). Latest definition of professional development in education, during and post Covid-19 emphasizes continuous learning and skill enhancement to improve classroom practices and student outcomes.

According to the Education Endowment Foundation (2021), effective professional development should be well-designed, incorporating elements such as active learning, collaboration, and sustained duration to be impactful. The Organisation for Economic Cooperation and Development (OECD) also highlights that professional development is crucial for teachers to improve their skills, adapt to new educational challenges, and ensure high-quality teaching that can lead to better student outcomes (OECD, 2023). By focusing on these aspects, professional development in education aims to create a more effective and dynamic teaching workforce capable of meeting contemporary educational needs.

For the purpose of this research, Professional Development is defined as:

"an ongoing process that encompasses the acquisition of new knowledge and/or development of skills related to some aspect of a faculty member's professional responsibilities which results in the escalation or improvement of pedagogical skills, performance skills, and/or technological skills, necessary to enhance teaching and learning".

2.3. Trends and Issues of Fractional Staff's Professional Development

Previous studies have demonstrated that apart from the full-time staff, fractional staff tutors play a crucial role in students' learning. For instance, research indicates that part-time and adjunct faculty can provide diverse perspectives and flexible teaching approaches, enriching the educational experience for students. The involvement of fractional staff can enhance the breadth of expertise available to students, contributing positively to their academic achievements and overall learning environment (Adarkwah et

al., 2021; Armellini et al., 2017; Caruth & Caruth, 2013; Kezar, 2013). Bevan-Smith et al. (2013) in a study conducted on fractional staff also emphasised universities must both acknowledge and be acknowledged of the critical contributions fractional staff make to the success of the courses they teach, and their contribution to the successful operations of a university (David, 2000).

Although recently, various studies have highlighted the joys fractional staff obtain such as flexibility, work-life balance, and multiple job possibilities, it is equally important to learn the downsides such as being excluded in faculty happenings, ill-informed on academic management and operation matters, marginalised and undervalued (Indradewa, 2024; OECD, 2023).

Today as more and more universities are switching their educational modes to online and hybrid teaching and learning, a consequence of post Covid-19, the necessity to hire fractional staff has become even greater. However, since ages fractional faculty has always been undermined and not provided the exact professional development that is required for effective teaching (Cohen & Vincent, 2023).

2.4. Research Aim

As universities increasingly embrace the borderless realm of online learning, the demand for flexible and accessible education has led to a significant rise in student enrolment even in Malaysia. This expansion has necessitated a corresponding increase in the employment of fractional academic staff. Hence to effectively support these staff members and ensure the quality of online education, it is crucial to determine their specific support needs. Focusing and comprehending these needs will assist higher education institutions uphold quality in standards and encourage a positive growth-environment among academicians.

Despite the crucial role fractional staff demonstrate in higher education, there persist lack of empirical data that discusses on the support requirements of fractional academic staff who teach online in Malaysia. Research on support needs for academics thus far has been more focused on teachers at schools or full-time staff at the university. Of the research on professional development conducted within these groups, almost all highlighted the importance of systematic training programs and the need for quality facilities and resources. Studies by Aziz and Rahman (2020) and Nair (2016) have revealed that full-time faculty members benefit significantly from specifically designed professional development opportunities and institutional motivation to enhance their teaching and research capabilities. Mohd Yusof and Lee (2021) on examining the effectiveness of professional development programme at the university level also concur that effectively designed professional development can positively impact staff's performances in teaching and learning. Similarly, research on teachers attached to schools has emphasized the need for continuous professional development as to address the embryonic demands of the education system which ultimately impacts teaching effectiveness (Chong & Ng, 2019; Ithnain, 2022; Wong & Lam, 2022).

With a noticeable gap in research on the support needs of fractional academic staff teaching online in Malaysia, this study was hence designed to address the following research questions:

- i. What support do fractional academic staff teaching online require?
- ii. Which type of professional support is perceived most important by the fractional academic staff teaching online?
- iii. What topics do fractional academic staff teaching online prefer as training programmes and seminars?

3. Methodology

3.1. Research Design

The study reported in this paper is part of a larger study on higher education professional development among adjunct faculty. For this study, a mixed-method approach, consisting of survey questionnaire and focus-group discussion, was utilised to understand the opinions of fractional academic staff teaching online regarding their professional development needs.

3.2. Term of Reference

In this study, the term '*fractional academic staff*' and '*tutor*' will be used interchangeably. With either term used, the intended meaning will remain the same.

3.3. Context

The study was carried in an online university, which is one of the first online distance learning (ODL) University in Malaysia, offering various undergraduate and postgraduate programmes to about 180,000 students, situated all over at their 35 centres. To teach these students, the university employs more than 9,165 tutors, a number previously recorded in the online university's database as of May Semester of 2009. However, at present, although the numbers may fluctuate every semester, it was reported that the minimum at any one semester, about 3,000 to 4,000 of these tutors will be engaged at its 35 learning centres situated in all the major cities and towns of the country (Ali, 2009; Awang, 2024).

3.4. Participants and Data Collection

In September 2022 the Centre Director of the online university was approached and informed of the study. In March 2023, during the university's professional day, the research team was given the opportunity to distribute the survey to all participants. From the 85 tutors that received the survey, a total of 77 tutors completed the survey and successfully submitted to the research team. As for the focus group discussion, the member of the research team managed to obtain a group of six tutors post the survey completion, to gain further elaboration. The focus group discussion was scheduled one month after the quantitative data collection to be able to have a more data-driven discussion with tutors on their needs for professional development.

3.5. Research Instruments

A survey questionnaire adapted from Beaton and Gilbert's (2013) analysis on developing effective part time teachers, was designed as the quantitative method of data collection. The first part of the survey seeks information on participants' demographics, while the second part of the survey focused on the support fractional staff would like to receive and which of the support type was perceived most important. The questions in section two were designed using a four-point scale ranging from highly preferred to least preferred (4 to 1). Prior to study, a pilot test was carried out with a sample of 30 fractional staff to assess the reliability of the instrument. The questionnaire's reliability, which was assessed using Cronbach's Alpha, returned a value of .894, indicating a high level of internal consistency and suggesting that the items on the questionnaire are well-correlated and measure the same underlying construct effectively. Following this, a focus group discussion was done a month after the survey questionnaire. The discussion guide included three carefully structured questions regarding preferred professional support topics based on the data obtained from the survey analysis in section two. To ensure the trustworthiness of data obtained from focus-group discussion, the self-developed discussion guide was reviewed by two subject-matter experts (SMEs) and an inter-rater reliability test was also conducted. A Kappa score of 0.74 was achieved which ensured substantial agreement and instrument reliability (McHugh, 2012).

3.6. Analysis

Demographic details of the tutors such as experience, length of employment and nature of employment were derived from the completed surveys. Groups were formed based on participants length of service which was useful in calculating the mean response to the level of interest for each form of support. To understand if tutors were significantly more interested in one form of support to another, a Kruskal-Wallis ANOVA analysis was used. As for data obtained through focus-group discussion, thematic analysis was applied to identify most important and least important topics.

4. Results

4.1. Demographic Details of the Participants

From the 77 respondents, around 24.7% had been tutoring for a year or less, while the majority, 75.3%, had experience ranging from two to ten years. Most tutors reported teaching online classes with 50 to 60 students, accounting for 64.9% of the respondents, which suggests that this is the prevalent format for online tutoring at the university. In contrast, 35.1% of the tutors indicated that their roles involved supervisory-based sessions. Of the 77 participants, 26 tutors (33.8%) were postgraduate students at the university pursuing a PhD while 51 tutors (66.2%) worked full-time in other organizations.

4.2. Support Required by Fractional Academic Staff Teaching Online

Tutors provided 174 different responses to the unrestricted questionnaire (likert-scale) which were then coded into four categories by rank: professional support (highly preferred-66), structured operations and organisation (second highly preferred-54), recognition (third highly preferred-30), and better facilities (least preferred-24). In terms of professional support, items identified by the respondents included online training modules, discipline-specific peer-coaching with experienced tutors, a printed manual for new online tutors, seminars, and informal discussion groups. As for structured operations and organisation, tutors necessitated that universities should provide well-defined job descriptions and key performance indicators related to their teaching roles, rather than focusing exclusively on only full-time faculty. Gaining better acknowledgment for their efforts, including monetary incentives and certifications were some of the highly selected items in the survey. In addition to having better facilities as a form of support, tutors requested appropriate working space where they could complete their relevant academic work while at the same time have the opportunity to be part of a community of practice.

4.3. Type of Professional Support Perceived as Most Important

In analysing the survey data, it was established that the need for professional support was utmost important for participants. A notable difference was observed between new and experienced tutors regarding the types of professional development opportunities they valued. New tutors exhibited a significantly higher interest ($p < 0.05$) in online training programs and seminars as compared to their experienced equivalents. The finding suggests that new tutors seem to seek more structured and straightforward forms of training to support their initial entry into the role.

On the contrary, both new and experienced tutors showed a strong preference for seminars ($p < 0.001$) over discussion groups. This indicates a consensus that seminars, which may offer more conventional and thorough content, are perceived as more beneficial than discussion groups, which is observed as less structured.

Furthermore, the survey data indicated that all tutors were slightest interested in more informal, physical professional support opportunities. Among these, discipline-specific peer-coaching and informal discussion groups received the lowest levels of interest, suggesting that tutors may prefer more formal or structured forms of professional development over casual, peer-based interactions.

Interestingly, there was no significant difference between the interest in informal discussion groups and the printed manual for new online tutors ($p > 0.05$). This lack of significant difference implies that the printed manual is perceived similarly to these less favoured informal options, potentially reflecting a lower value placed on these resources compared to more interactive and engaging forms of professional support.

4.4. Training Programmes and Seminar Topics Perceived Important by Tutors

On identifying preferred topics for professional training and seminars, a focus group discussion was conducted. Based on the discussion, thematic analysis found four important topics on professional support.

All tutors (100%) identified '*efficiently operating the Learning Management System (LMS)*' as the important training topic for both new and experienced tutors.

The training on LMS is something that must be done on a semester basis because not only new tutors but even the senior ones may forget one or two operations of LMS. -T3

Additionally, 83% tutors also showed interest in '*online classroom management*'.

Classroom management in online environment is very crucial topic since many of us are not ODL trained tutors.-T1

Online classroom is different than what we went through as students. Therefore, handling online classroom should be taught to us. -T5

Of the six tutors, the new tutors (4 participants) responded that '*effective feedback*' should be included in training programmes. This was then agreed by the experienced tutor although they did not really want to attend any.

Yes, for new tutors, they may not be experienced in giving feedback. For us, the senior ones, we are used to this since we have practised it.-T4

The experienced tutors (2 participants) pointed out that '*application of digital technologies in online teaching and learning*' is a must have topic for any professional training or support. Although this was at first not very supported by the new teachers as many of them are young and has familiarity to technology, at the end they also agreed that the technology they know may not be aligned to educational purposes.

Although at first, I thought I am good at applying technology, but I agree with T3 that we may not be aligning the use of technology to content and pedagogy. -T6

Almost all tutors stated '*understanding students' personality*' as the least important topic, except one tutor stating its importance.

Since most of us are teaching online, and the students are also passively participating during an online class, there is no further need to understand students' personality.-T2

I agree. Its online. We hardly have time to get to know students. -T6

5. Discussion

Results from survey revealed that most participants valued structured and systematic ongoing training programs and seminars than informal discussions with peers. Given that many tutors at this university have full-time commitments, either as postgraduate students or employees elsewhere, they did not prioritize attending long-hours of voluntary discussion sessions. The study emphasized that seminars and workshops with well-planned instructions were seen as highly effective for professional development. This suggests that universities and colleges around the globe should focus on these structured formats when designing professional development for fractional staff teaching online. This finding is similar to that of Lee and Chan (2020) which stated that structured and time-specific professional training format brings out better outcomes and engagement in professional development programmes than informal ones. Johnson and Green (2018) and Fernandes et al (2023) further supports that structured and specific professional development activities like trainings and seminars significantly improved educators' teaching practices and directly impacted job satisfaction. These findings collectively suggest and confirm the importance of the dimensions pointed out by Darling-Hammond, Hyler, and Gardner (2017) that higher education institutions should invest in ongoing trainings, workshops and seminars to maximize the impact of their professional development efforts.

In addition, similar to a previous study by Jones and Kim (2017), this study also points that fractional staff teaching online have highlighted the need for structured operations and clear organization where universities should provide well-defined job descriptions and associated key performance indicators related to fractional staff's teaching roles. Compared to full time faculty, fractional staff often feel undervalued despite their critical contributions to a university's success and student retention efforts. Findings also emphasized the necessity to recognise fractional staff's needs for an appropriate workspace as an academic which further concurs Lee and Hsu's (2019) findings on the

importance of adequate office space for part-time faculty to manage their teaching and administrative tasks as well as collaborate with colleagues. Research supports the view that fractional faculty should receive better acknowledgment and recognition as it is beneficial and brings about positive motivation to staff effectiveness. This aligns to White and Gallagher's (2020) statement that enhanced support and structure for fractional staff can substantially impact their performance and commitment to their establishment.

On the aspect of specific topics for professional development, research has pointed out that tutors articulated a strong interest on training in technology, particularly in effectively using the university's learning management system (LMS). This focus on technology training aligns to several studies which emphasized that faculty members consistently seek training to enhance their proficiency with LMS platforms and relevant digital technology tool and applications. This displays the critical role technology play in online education (Roberts & Turner, 2018; Adams & Murphy, 2020). Additionally, research by Wilson and Johnson (2021) also stresses the prominence of providing targeted training on LMS functionalities which influences teaching effectiveness and faculty efficiency.

Apart from training on LMS, fractional staff also underlined the need for seminars on online classroom management, with most implying that managing students online is considerably more challenging than managing them in a physical classroom. Past research have found that online classroom management presents distinct challenges, including maintaining student engagement and managing virtual interactions, which are less prevalent in face-to-face settings hence highlights the complexities and unique demands of virtual teaching environments (Davis, 2021; Miller & Roberts, 2023; Smith and Jone, 2019). The need for specialized training and support for online classroom management, provides assurance that instructors are capable to handle the dynamic nature of virtual learning environments (Patel & Khan, 2022). Findings of this study also concurs to previous studies of Smith and Bath (2004) as well as Guskey (2000; 2002) that emphasizes the importance of equipping faculty with practical tools and methods for effective classroom management to accelerate teaching effectiveness which in turn impacts students' satisfaction (Miller & Roberts, 2023).

In addition, this study also highlighted that although tutors were familiar with technology in general but lacked in-depth knowledge of its educational applications hence requiring the need for more workshops and training topic on the application of digital technologies in online teaching and learning. This observation aligns with recent findings that underscore a gap between general technological proficiency and its effective application in educational contexts. Similar to Johnson and Brown (2020), participants in this related that while teachers have a basic understanding of digital instruments and applications, they regularly struggle with integrating these technologies effectively into their teaching practices. Similarly, Harris and Thompson (2021) reported that instructors who are knowledgeable about technology still struggle in applying these tools in pedagogically meaningful ways hence requiring continuous and targeted professional development programs that bridge the gap between general technological skills and their specific practices in the online environment (Chen & Wang, 2022). Green and White (2023) and Harris and Thompson (2021) further confirm this need, indicating that heightened training in educational technology application can lead to more effective online teaching strategies which concludes to improved learning outcomes.

6. Conclusion

This study stresses the changing role shaped by recent global events of fractional academic staff within higher education, specifically in the context of online learning environments. As universities accommodate to the increased demand for flexible and accessible education, fractional staff have become integral to delivering high-quality learning experiences. Unfortunately, in the Malaysian context, fractional staff's professional development and support needs have not been adequately addressed.

Overall, findings from this study have uncovered four main types of support required by fractional staff teaching online. Evidence points out strong preference among tutors for structured professional support such as workshops and seminars. In addition, the importance of clear organizational structures

and recognition for fractional staff including appropriate workspace provision were some of the highly favourable support needs identified. Additionally, as for preferred topics for professional support, while tutors are generally familiar with technology, there is a recognized gap in applying digital tools specifically learning management systems effectively within educational contexts. On the whole findings from this study is coherent with literature suggesting that effective support systems can improve job satisfaction and performance of staff (Guskey, 2000, 2002; Jones & Kim, 2017; Lee & Hsu, 2019; White & Gallagher, 2020).

In summary, the findings from the study addresses fractional staff's specific support needs ranging from structured professional support, clear role definitions and individualised recognition to targeted training topics in LMS and online classroom management. Findings also advocates that structured and well-organized professional development opportunities can enhance the effectiveness of their fractional academic staff and ultimately improve the quality of online education.

7.1. Significance of the Study

The study addresses a significant gap in research concerning the support needs of fractional academic staff, particularly in the context of online education. Findings from this study contributes valuable insights that can inform policy and practice in higher education since it offers actionable recommendations for higher education institutions to improve the support and development of fractional staff. This has implications for policy-making, resource allocation, and the design of professional development programs. By addressing the specific needs of fractional staff teaching online, universities can improve overall institutional effectiveness. Well-supported fractional staff are more likely to contribute positively to the institution's goals, enhance teaching quality, and support student success. Lastly findings of this study also contribute to the academic literature on higher education, professional development, and online teaching, providing a basis for future research and contributing to a deeper understanding of the challenges and needs of fractional academic staff.

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