



The Role of Academic Development (Research and Teaching) in Enabling Quality Teaching

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ABSTRACT

CONTEXT

Extensive research has been carried out regarding the theoretical framework of what constitutes effective teaching at higher education. Some focused on the barriers that inhibit effective teaching including limited training in teaching for research-active academics, and poor systems for academic development in terms of structure and effectiveness at the institutional level. By reviewing the literature, only limited studies focus on academics' perspectives regarding academic development, hence this is a topic for further investigation.

PURPOSE OR GOAL

There is increasing interest in how academics are supported to develop as teachers to enhance teaching practice. This study aims to build upon the current research on academic development through the lenses of academics to explore the interventions of academic development initiatives that constitute effective teaching at higher education and the impediments that prevent academics from being effective teachers. This study is framed around a central research question: How is academic development fostered amongst teaching-focused academics?

APPROACH OR METHODOLOGY/METHODS

This study proposes a method to investigate academics' conceptual understanding and experience of academic development for effective teaching, which is descriptive and interpretive. A thematic analysis approach is considered as most relevant in answering the research question. The approach is a combination of inductive and deductive techniques that allow themes to emerge from data and. A semi-structured qualitative interview is outlined in this study.

ACTUAL OR ANTICIPATED OUTCOMES

For successful implementation of quality teaching, universities must build a culture of quality research-informed teaching as a strategic direction that aligns with their policies and practices. It is encouraging to find that universities are advocating for SoTL intervention as part of their academic development initiatives to enhance quality teaching and incentivising a research-focus amongst academic staff. However, for those in teaching-only roles, there is a divergence between expectations and incentives around academic development: research is not formally required, but a research degree frequently is. To maintain their academic identity and develop as an academic, teaching-only staff are still incentivised to research. We aim to explore this divergence and how it affects teaching staff. It is imperative that institutional policies and practices position teaching as a separate but equal partner to research, and to explore how the institutional policy context shape research–teaching dynamics.

CONCLUSIONS/RECOMMENDATIONS/SUMMARY

Despite the reasonably straightforward theorisation of how academic development impacts on teaching and learning, it is challenging to monitor and evaluate this complex task due the scale and range of direct and indirect influences. However, to continue improving academic development initiatives, it is essential to monitor its progress. Monitoring quality teaching is an area that needs further investigation.

KEYWORDS

Academic development, effective teaching, thematic analysis

Introduction

Academics employed in teaching-only positions, or “Teaching Focused Academics” (TFAs) are those who have no research component in their job description. These positions may be permanent or fixed term, with fixed term employment contracts being renewed on term basis. TFAs have strengths and competencies in areas that are vital to the sustainability of their academic institution. However, they are under-recognized resources featured with no sabbatical opportunities and a high teaching workload.

Because of their teaching-only roles, TFAs realise that their academic identity is fragile and needs to be strengthened by having research roles in their job requirements. Without a strong research base and regular publications, it is almost impossible for TFAs to make any further career progression. This unfortunately can result in considerable consequences for work satisfaction and development of their academic vitae. It is well-recognised by the academic community that performance in research has become highly prized in academics’ recruitment and promotion, that is to “publish or perish”, but little attention is paid to the way in which that mandate still applies doctoral graduates in non-research roles.

As TFAs are a lynchpin of many faculties, enabling effective teaching of large undergraduate courses that free research-active academics’ time, it is imperative to explore their perceptions of their academic development to embed them into the academic culture. Therefore, this paper presents a proposal to qualitatively collect and analyse TFAs’ perceptions of their academic development needs.

Literature Review

Academics' perceptions of their development have long been a focus of interest in academia. It is well- recognised that academic development is a necessity due to rapid changes in academia, which result from changing economic and social forces, new teaching and research methods and technological updates including use of IT to mediate/facilitate instructions (Buckley & Cowap, 2013; Tamim et al., 2011). A favourable atmosphere to encourage academic excellence in higher education institutions requires a systematic career progression and structure for academics (Chen et al., 2015). Where TFAs are fresh PhD graduates in their first academic post, they can be categorized as early career academics (ECAs) for the purpose of an extensive literature search for similar topics. An appropriate career structure and preparation may help those entering academia to be ready for their roles as academics (Walker & Yoon, 2017). Amongst ECAs and TFAs, initial transitions into higher education can have considerable consequences for career development and work satisfaction (Hollywood et al., 2020).

In general, academics with teaching-only roles only are heavily involved in routine teaching with no genuine opportunities for discipline-specific research. However, as their doctoral qualifications are discipline-specific, they frequently have limited skills in curriculum development and are underequipped to deliver competent learning activities (Matthews et al., 2014). This presents challenges for career development in education of the discipline, and the lack of research in their discipline impedes successful transition into research-academic roles. The resulting fragile academic identity (Archer, 2008) can make this group particularly susceptible to negative perceptions and adverse experiences in their work. The dilemma of the academic development needs in terms of scientific research engagement has become a topic of debate over the last two decades, as shown in Figure 1 below.

Documents by year

Scopus

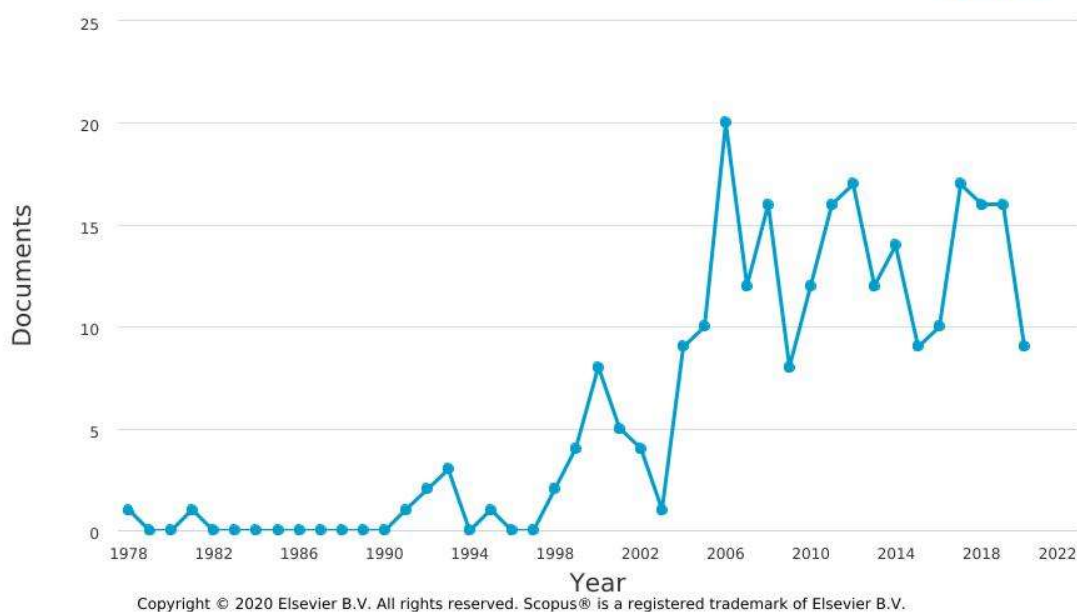


Figure 1: Literature search of academic development AND engagement in research

One of the earliest studies, by Gao et al. (2000), used qualitative interviews to investigate what research and research methods meant to academics in terms of their progression. Recently, Hollywood et al. (2020) explored academics' perceptions of their work environment along with their beliefs about their future career development through qualitative analysis. They highlighted distinct intrapersonal dimensions and experiential /situational factors, which relate to variations in the perceived potential for career development. Between these two studies, the literature is rich in reporting about academics' perceptions of their development, mainly with reported qualitative case studies. The International Journal for Academic Development (IJAD) produced two special issues, in 2009 and 2011, to discuss concerns and considerations for new academics amongst the academic development community.

Recent research has developed insights into predictors of successful career development, demonstrating different conceptions of success in various facets of academic roles. Hill et al. (2019) investigated the key elements to consider in building and sustaining academic development programs for ECAs. In their quantitative study, Matthews et al. (2014) reported ECAs' attitudes and perceptions of teaching versus research and involvement in academic development. Lai (2009) investigated the new challenges to the work-life of academics, using qualitative research methods to answer how academics should maintain their academic status. In his semi-structured interviews, he concluded that research performance has become highly prized in academics' recruitment and promotion. Furthermore, number of research publications are increasingly being used to judge on academics' performance as part of their career promotion. Among the academic community, it is widely believed that success in research, as opposed to teaching, to be a stronger predictor of career advancement (Sutherland, 2017; Bosanquet et al., 2017). Furthermore, increases in job satisfaction are perceived to predict success in research, but not teaching (Stupnisky et al., 2016).

Gap in the Literature

The unbalanced relationship of importance between the teaching and research is evident in the literature. However, there is no reported proven practices/protocols to re-balance this

relationship up to date. Furthermore, there is no road map on how to create an appropriate career progression structure for academics of heavy teaching roles such as TFAs. It is an area that calls to enhancing TFs' academic development by including research productivity in their academic progression plan. Academic institutions need to enable ECAs, including TFAs, to access development that speaks to their current responsibilities as well as their career intentions.

Research Objectives and Questions

With this endeavour, the main objective of this proposed study is to qualitatively investigate TFAs' perceptions of their development needs. This objective should establish and conclude the importance of a research component in TFAs' job description and how it is reflected in their academic progression. The objective of this proposal aligns with a growing international interest in academics' perceptions of their development needs (for example, Castelló et al., 2017; McKay & Monk, 2017; Acker & Webber, 2017; Greer et al., 2016).

Research Questions

This proposed study is guided by two major research questions. Under the heavy teaching load and limited access to scientific research opportunities:

- (1) How do TFAs perceive the value of effective teaching versus research productivity towards academic development?
- (2) What motivates TFAs to engage in research given it is not a component of their role?

These main questions will pave the way for further discussion with expanded direct and non-direct sub-questions. By answering the questions above and linking them to the TFAs' academic development needs, the aims of this study will be covered entirely.

Research Design

Proposed Methodological Approach

The construct of academic development could not be easily reduced to measurable items on survey instruments, and so warrant a qualitative investigation in principle. This research follows a qualitative approach using semi-structured interviews with a group of TFAs to produce the required data. The perspectives of subjective (rather than objective) understanding, is necessary to glean TFs' perceptions of their academic development needs, so informs the methodology adopted in this research.

Theoretical Framework

For the reasons outlined above, the theoretical framework of the proposed study is one in which the TFAs' needs regarding engagement in research and their academic development are explored through their reflective observations. This theoretical framework aligns well with the interpretive epistemology by explaining career development as descriptive. The research's ontology of the qualitative approach includes human psychological perspectives. Accordingly, the research epistemology in this way of acquiring knowledge defines no single reality. This proposed study will be an example of the interpretive research paradigm that perceives no single truth among the participants' experiences, and this is why the reality

needs to be interpreted. Such a paradigm has the flexibility to define academics' perceptions of their career development, in non-measurable numerical terms.

Inquiry and Data Collection

Sample Size

The participants will be selected from a pool of TFAs in different tertiary institutions. The purposeful sampling for qualitative data collection and analysis by Palinkas et al. (2015) will be consulted for criteria of sample selection. The participants will be invited to take part in the study via an email sent to all. They will not be identified explicitly in any publications about the research outcomes.

Procedure

In a series of semi-structured interviews, a systematic procedure will be followed to ensure that the trustworthiness of the collected data will not be violated. The interviews will be conducted face to face or via videoconferencing (Zoom) sessions and run for around 45 minutes each. The sessions will be audio-recorded with the participants' consent and transcribed for analysis to elicit the academics' perceptions.

Interview's Questions

The participants will be asked a series of open-ended and flexible questions. Still, the most central one is how they perceive the engagement in research to build the foundation for their academic development. The main interest will be in the participants' personal opinions about how they have developed as academics and what influenced this development. The interviews will seek to elicit participants' views, understanding and experiences on the subject of their academic development to draw these personal opinions out in conversation. Where the interviewers think it is necessary, questions on these opinions can become increasingly focused as the interviews progress. The interview questions will be specific to begin with, but the participants will be given an expanded space to voice their perceptions, opinions and personal feelings. Offering such an area of freedom is supported by literature (Creswell, 2008). Wherever possible, the interviews will run as free-flowing conversations with the agreed vital questions inserted as prompts to ensure the interviews are comparable to each other in all sets.

At this initial stage of the proposal, the interviewers have created a set of questions to guide the interviews. However, they need to be further developed and arranged purposely based on the participants' own experience of academic development.

Data Analysis Approach

Thematic Analysis

Using qualitative analysis software (NVivo), the interview transcripts will be subsequently thematically analysed to construct a coding framework following Fram (2013). It will be necessary to examine the reliability of the preliminary codes obtained at the early stage. This can be done by eliminating scattered or redundant codes, collapsing similar codes, and narrowing down the final codes to broader overarching themes. The concept of data saturation that refers to the quality and quantity of information will be carefully applied. Data saturation can be defined as the point when "no new information or themes are observed in the data" (Guest et al., 2006, p. 59).

Data Mapping

Once the main themes are identified, the sub-themes will be further refined and linked to each other for coherence and further adjustments. Each coded excerpt will be condensed

into a short title that summarises its actual content. Every title will then be added to a concept map by locating it to related titles and linking them with explanatory labels as needed. As part of this process, a few titles will be relocated and relinked as new relationships emerge. After completing excerpts' processing, major themes, each with several sub-themes, will be evident. NVivo's codes, nodes architecture, word clouds/frequency, and concept and project maps will be created.

Data Analysis

To identify and analyse the overarching themes, a common approach to qualitative reporting will be followed to explain the descriptive accounts of the themes with support of illustrative direct quotations.

Research Limitations and Challenges

Trustworthiness

The technique of semi-structured interviews for data collection can alter the data in subtle ways with some limitations, as per the following.

- The personal knowledge, experience of the participants may influence findings and conclusions. Therefore, a high level of interview management is required.
- Due to the presence of open-ended questions, the conversations may delve into psychological interactions for data collection. Therefore, the discussions often tend to deviate from the main issue to be studied.
- The interpretation of the results can be biased because the interviewer's perspectives somehow influence it.
- The limits in sample size and identical engineering background may not represent a general understanding of how the TFs perceive themselves in the context of academic development.

For this study to be accepted as trustworthy, the researchers are keen to demonstrate that data analysis will follow an exhaustive manner through recording, thematizing the transcripts, and disclosing the methods of analysis with enough detail to ensure that the process is credible, transferable, and confirmable (Daniel & Harland, 2018).

While conducting this research of semi-structured interviews, it will be important to cross-reference the data obtained with related quantitative data. Unfortunately, this may not be achieved in this study due to its perspective-based method of research that is based more on personal opinions/experiences rather than objective results. Thus, the responses given will not be measured, and this study will not be statistically representative. In other words, the concept of triangulation will not be applied in this study. Triangulation is a "method of cross-checking data from multiple sources to search for regularities in the research data" (O'Donoghue & Punch, 2003, p. 78). The purpose of triangulation in qualitative research, in general, is to increase the credibility and validity of the results.

Research Formalities and Considerations

Ethical Approval

Ethical Approval is a requirement as the research is to be conducted/facilitated with human participants. The outcome of this research will be included in a research paper for conference/journal publication. The participants (TFAs) are free to consent to their participation (opt-in approach) in the research. A consent form with relevant information will be sent to the participants to sign and submit prior to every interview session.

The participants have the right to withdraw, without giving reason. They have the right to not answer any questions during the interview, and can also withdraw fully at any time during the interview without providing a reason. Participants can withdraw their interview responses at any time for three months following the interview, without providing a reason.

It is expected that participating in this research can be of direct benefit to TFAs groups and/or the wider community of ECAs as an opportunity to reflect on their role, and because the results of this research can potentially inform improvements to that role. Additionally, it is not expected that any harm would arise to participants from participating, and no aspects of this research are considered to raise any specific cultural issues.

There will be fair treatment in the selection of the participants. The invitation will be sent to a cohort of TFAs. The participants will be treated equally regardless of their opinions.

Research Significance & Contribution to Practice

There is a common understanding that TFAs should be permitted to be engaged in research on their practice. However, this understanding should be translated to practical steps. As TFAs are a key element to the delivery of higher education, universities must explore TFAs' perceptions of their professional development to include them more effectively into academic culture. This study will work as a formal submission on how to implement academic development for TFAs for better work satisfaction, staff retention, and students' engagement that should be reflected in greater financial benefits at the end.

References

- Acker, S., & Webber, M. (2017). Made to Measure: Early Career Academics in the Canadian University Workplace. *Higher Education Research & Development*, 36(3), 541–554.
- Archer, L. (2008). The New Neoliberal Subjects? Young/er Academics' Constructions of Professional Identity. *Journal of Education Policy*, 23(3), 265–285.
- Bosanquet, A., Mailey, A., Matthews, K. E., & Lodge, J. M. (2017). Redefining 'Early Career' in Academia: A Collective Narrative Approach. *Higher Education Research & Development*, 36(5), 890–902.
- Buckley, E., & Cowap, L. (2013). An evaluation of the use of Turnitin for electronic submission and marking and as a formative feedback tool from an educator's perspective. *British Journal of Educational Technology*, 44(4), 562–570.
- Castelló, M., McAlpine, L., & Pyhältö, K. (2017). Spanish and UK post-PhD Researchers: Writing Perceptions, Well-being and Productivity. *Higher Education Research & Development*, 36(6), 1108–1122.
- Chen, S., McAlpine, L., & Amundsen, C. (2015). Postdoctoral positions as preparation for desired careers: A narrative approach to understanding postdoctoral experience. *Higher Education Research & Development*, 34, 1083–1096.
- Creswell, J.W. (2008). *Educational research: Planning, conducting and evaluating quantitative and qualitative research*. Upper Saddle River, Pearson Education, USA.
- Daniel, B. K., & Harland, T. (2018). *Higher Education Research Methodology: A Step-by-Step Guide to the Research Process*. Routledge.
- Fram, S. M. (2013). Constant comparative analysis method outside of grounded theory. *The Qualitative Report*, 18(1), 1–25.
- Gao, Y.H., Li, L.C., & Wu, H.L. (2000). What 'research' and 'research methods' mean to TEFL teachers: Four cases. *Modern Foreign Languages*, 23(1), 89–98.

- Greer, D. A., Cathcart, A. & Neale, L. (2016). Helping doctoral students teach: transitioning to early career academia through cognitive apprenticeship. *Higher Education Research & Development*, 35(4), 712-726.
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough? An Experiment with Data Saturation and Variability. *Field Methods*, 18(1), 59-82.
- Hill, L. B., Austin, A. E., Bantawa, B., & Savoy, J.N. (2019) Factors of success: building and sustaining teaching professional development opportunities for doctoral students and postdocs. *Higher Education Research & Development*, 38(6), 1168-1182.
- Hollywood, A., McCarthy, D., Spencely, C., & Winstone, N. (2020). Overwhelmed at first: the experience of career development in early career academics. *Journal of Further and Higher Education*, (44)7, 998-1012.
- Lai, M. (2009). Challenges to the work life of academics: The experience of a renowned university in the Chinese mainland. *Higher Education Quarterly*, 64(1), 89–111.
- Matthews, K. E., Lodge, J. M., & Bosanquet, A. (2014). Early career academic perceptions, attitudes and professional development activities: Questioning the teaching and research gap to further academic development. *International Journal for Academic Development*, 19(2), 112-124.
- McKay, L., & Monk. S. (2017). Early Career Academics Learning the Game in Whackademia. *Higher Education Research & Development*, 36(6), 1251–1263.
- O'Donoghue, T., & Punch, K. (2003). *Qualitative Educational Research in Action: Doing and Reflecting*. Routledge Falmer.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health*, 42, 533.
- Stupnisky, R.H., Pekrun, R. & Lichtenfeld, S. 2016. New faculty members' emotions: a mixed-method study. *Studies in Higher Education*, 41(7), 1167–1188.
- Sutherland, K. A. (2017). Constructions of success in academia: an early career perspective. *Studies in Higher Education*, 42(4), 743–759.
- Tamim, R. M., Bernard, R. M., Borokhovski, E., Abrami, P. C., & Schmid, R. F. (2011). What forty years of research says about the impact of technology on learning. *Review of Educational Research*, 81(1), 4–28.
- Walker, J., & Yoon, E. (2017). Becoming an academic: The role of doctoral capital in the field of education. *Higher Education Research & Development*, 36, 401–415.

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