

Khalaf, Kawthar , Alsulami, Sami. (2023). The Role of Discretion in Faculty Development: Empirical Evidence and Analysis of Saudi Higher Education, *Journal of Educational Science* 9(4), 639 - 661

---

## **The Role of Discretion in Faculty Development: Empirical Evidence and Analysis of Saudi Higher Education**

---

### **Dr. Kawthar Khalaf**

Assistant Professor of Education  
Najran University  
kawthar.alhajjaj@gmail.com

### **Dr. Sami Ghazzai Alsulami**

Assistant Professor of Education  
Islamic University of Madinah  
sami.alsulami@iu.edu.sa

### **Abstract:**

Discretion is the exercise of a mixture of professional judgement and personal intuition to make decisions when hard facts may not be enough. The purpose of this study is to explain the level of faculty development via understanding the role of discretion. In this fashion , the study investigates the impact of faculty discretion on the level of faculty development. Following the traditional scientific paradigm , the study focuses on quantitative analysis where the level of faculty development is specified in terms of the extent to which discretion is exercised. The study contributes to the contemporary literature by shedding light on the role of faculty exercise of judgement based on past professional experience and personal intuition in the setting of Saudi higher education. This is particularly relevant given the importance that the Saudi 2030 Vision places on education and human capital. Toward this end , the study reports a parameter estimate of 3.36 that is statically significant at all levels while purporting to the difference in the level of faculty development between the two types of faculty members separated by the exercise of discretion and professional judgement.

**Keywords:** Discretion , faculty development , professional judgement.

ويب، احمد. (٢٠٢٣). دور التقدير في تطوير أعضاء هيئة التدريس: الدليل العملي وتحليل التعليم العالي السعودي. *مجلة العلوم التربوية* ، ٩ (٤) ، ٦٣٩ - ٦٦١

---

## دور التقدير في تطوير أعضاء هيئة التدريس الدليل العملي وتحليل التعليم العالي السعودي

د. سامي السالمي<sup>(١)</sup>

د. كوثر خلف<sup>(٢)</sup>

### المستخلص:

تقوم هذه الدراسة على فهم الدور التي قد تلعبه الممارسات التقديرية والبديهية في جودة التدريس وتطوير أداء أعضاء هيئة التدريس. وتتبني الدراسة المنهج التقليدي للبحث العلمي والبحوث الكمية إذ يتم تقدير نماذج لجودة التدريس وأداء أعضاء هيئة التدريس بعد معاملة متغير مدى ممارسة التقديرات بمثابة متغير مستقل في كل نموذج. وفي هذا الإطار قد تضيف هذه الدراسة لأدبيات جودة التعليم من خلال فهم لحالة التعليم العالي السعودي في ظل رؤية المملكة ٢٠٣٠ والتي تضع جودة التعليم ورأس المال البشري على قمة أولوياتها.

الكلمات المفتاحية: السلطة التقديرية ، جودة أنشطة التدريس ، تطوير أداء أعضاء هيئة التدريس. الحكم المهني.

---

(١) أستاذ التربية وعلم النفس المساعد بجامعة نجران، kawthar.alhajjaj@gmail.com

(٢) أستاذ القيادة التربوية المساعد بجامعة الإسلامية بالمدينة المنورة، Email: sami.alsulami@iu.edu.sa

## Introduction and Research Questions:

The research problem in this study is to empirically investigate the impact of faculty members' exercise of discretion on the level of faculty development. The level of faculty members' development is driven by a host of factors (Enders et al. , 2013). These factors can be broadly categorized according to a typical education-production model into institutional and non-institutional (Roodt , 2012). Furthermore , the empirical impact of many of these factors has been widely investigated in the literature (see , e.g. , Beach et al. , 2016). However , the role of individual faculty members' exercise of discretion , or judgement based on past professional experience and personal intuition , has up to this point received little scholarly attention (see , e.g. , Lim and Choy , 2014; Ratka et al , 2017). In this light , the study seeks to remedy this gap in the literature by investigating the impact of faculty members' exercise of discretion on their development. The study follows the traditional scientific paradigm anchored in a quantitative approach , which specifies faculty development in terms of the level of faculty exercise of discretion. In this fashion , the study entails both conceptual and applied contributions to the contemporary literature. Conceptually , the study produces evidence with respect to the relationship between the level of faculty development and the level of faculty exercise of discretion. Such evidence may serve as a building block when formulating testable statements and empirical predictions in general settings and different data sets. The applied contribution of this study revolves around highlighting the relevance of faculty exercise discretion for the level of faculty development in the Saudi context. In fact , Saudi higher education has undergone a fundamental transformation in teaching methods , instruction patterns , and educational management technologies. These drastic changes have been in response to a number of challenges. At the forefront of those challenges is realizing the contemporary Saudi 2030 Vision. Other challenges include the current information age and its massive data and networking capabilities , the increasing demand for knowledge-based societies , the unbounded value of scientific solutions , and the growing size

of research-based industries (Ozga et al. ,2011). In response to this collection of challenges , Saudi higher education has become increasingly demanding , with the subject of faculty development emerging as perhaps the most pivotal.

With relevance to this study , Lindholm (2005) proposes that faculty exercise of discretion and professional judgement is expected to provide for establishing healthy social connections with students. Shaw (2011) contends that faculty exercise of professional judgement is grounds for the effective design of teaching and instructional interventions. Peters (2013) links faculty exercise of professional judgement to the teaching innovation in higher education. Dileo (2015) contends that faculty exercise of academic discretion may support the transparency and economic efficiency endeavors of higher education. Winkelmes et al. (2016) support that faculty exercise of professional judgement not only enhances academic transparency , but also promotes student learning outcomes. Jongbloed et al. (2018) argue that faculty exercise of discretion is critical for the accountability of teaching and research. O'Donnel and Sadier (2021) set the tone further for academic exercise of discretionary professional judgement , which may manifest in typical teaching activities and in both faculty formal and informal institutional communications.

Unlike prior literature relevant to the study of faculty exercise of discretion and professional judgement , this study adheres to a strict quantitative design where the impact of faculty discretion is investigated directly with respect to the level of faculty development. This study is therefore needed since the quantitative evidence on the subject is rather scant.

## Hypothesis Development and Understanding the Role of Discretion

The present study explores the relationship between faculty development and faculty members' exercise of discretion. Specifically , the study investigates the impact of faculty members' discretion on their development.

The study contributes to the literature by shedding light on the role of faculty discretion in the context of Saudi higher education, a subject of particular relevance given the importance that the Saudi 2030 Vision places on education and human capital.

Faculty members' exercise of discretion and professional judgement is driven by a host of factors, including the modern knowledge economy, advances in technology, and the globalized orientation of higher education (Khelifi & Triki, 2020). The holistic concept of discretion and professional judgement in higher education encompasses the value systems of faculty members along with their accumulated skills, preferences, attitudes, choices, and tacit knowledge (Roodt, 2012). In fact, the role of faculty discretion in higher education becomes increasingly pronounced in the advent of the distance education and e-learning (Bruniges, 2007). The growing availability of learning banks and multi-modal instruction makes it unprecedently convenient for faculty members to tailor most teaching and assessment activities according to their choices, preferences, styles, and backgrounds, as well as to student learning outcomes (Lion, 2011). In addition, given the increasing focus on the perspectives of individual students and the need to configure instructional materials in accordance with those perspectives, faculty members' exercise of discretion pertains directly to student learning outcomes (Enders et al, 2013).

Furthermore, the recent change in epistemological assumptions and views engendered by the modern knowledge economy endows faculty members with valuable opportunities to exercise discretion to enrich and reinvigorate the learning experience of their students so as to instill the values of ingenuity, originality, critique, and problem solving (Fink, 2013). Perhaps the main implications modern knowledge economies have for higher education is the unequivocal focus on the individual student set of observable, specific skills and measurable, evidence-based capabilities (Bruniges, 2007). The shift from student learning objectives to student learning outcomes reiterates the importance of what students are specifically

and realistically able to do precisely based on integrating various disciplines and many seemingly different strands of knowledge (Capano, 2010). Such emphasis on student learning outcomes requires that faculty members continually reengineer their teaching and assessment activities in ways responsive to the growing importance placed on the foundational production of fundamentals, research abilities, thinking skills, teamwork values, data analysis, responsible living, well-educated behavior, and lifetime commitment to continuous and efficient learning (Kyaw, 2020). Faculty members' exercise of discretion in meeting this demand naturally reflects their accumulated expertise, teaching styles, research agendas, research paradigms, backgrounds, and updated visions of the nature of knowledge and learning (Jimenez et al, 2019; Kezar and Posselt, 2019). Such exercise of discretion amounts to continual reassessment of the ontological and epistemological assumptions in which faculty members ground their teaching and assessment activities (Lim and Choy, 2014). Moreover, as academic contexts increasingly accept qualitative, context-based paradigms, exercise of discretion by individual faculty members grows significantly in prominence (see, e.g., lion, 2011). This increase in prominence results from the fact that discretion in the form of professional judgement and personal intuition allows for context-based instructional formulation that simultaneously advances educational goals and caters to the needs of individual students.

In view of the preceding, the present study is designed to examine the role of faculty exercise of judgement based on past professional experience and personal intuition in a manner aligned with the objectives of developing empirical understanding of the role of discretion in faculty development, producing parameter estimates, and documenting Saudi evidence on the subject. Following a traditional scientific paradigm, the study anchors its analysis in a quantitative approach specifying the level of faculty development in terms of the extent to which discretion is exercised. Such exercise of discretion comprises the study's exogenous variable, while the endogenous variable captures the degree of faculty development. For the purpose of

empirical analysis , the study measures the endogenous variable continuously; it measures the exogenous variable , by contrast , on a binary basis. The study utilizes a formative assessment to assess individual faculty members' exercises of discretion , while it assesses faculty members' development by quantifying their peer-reviewed publications. Though there exists a number of different approaches via which the level of faculty development can be measured (see , e.g. , Gatti and Mcavoy , 2017; Hess and Mcavoy , 2015; Zimmerman and Robertson , 2017) , this study elects to use the rather objective measure of the number of peer-reviewed publications based on convenience , tractability , ease of exposition , and data availability. It follows that the results and conclusions of this study will be inevitably limited by this measurement choice. Future research in this concern may revisit the subject while employing different measurements (see , e.g. , Gatti and Mcavoy , 2017; Hess and Mcavoy , 2015; Zimmerman and Robertson , 2017).

In view of the preceding , the empirical study advances the following alternative hypothesis:

HA: Discretion has a positive impact on faculty development.

The study thus tests the null hypothesis that there exists no role for discretion in faculty development against the alternative hypothesis that the impact of discretion on faculty development is positive. The rest of the study is presented in terms of reviewing the relevant literature , reporting the empirical study's results and offering some concluding remarks.

## Literature Review

Khelifi and Triki (2020) identify three types of academic discretion: rule discretion , value discretion , and task discretion. They find that whereas rule discretion is the most frequently adhered-to type in many professions , value discretion is most adhered-to by higher education faculty. Collins (2016) describes value discretion as an advanced type of exercise of instantaneous judgment framed within established ethical codes of conduct and professional

norms , concluding that faculty members' constrained exercise of discretion lends significance to the internal and external policy and institutional standards guiding faculty members' judgement. Bruniges (2007) underscores the importance of academic discretion and professional judgement that are informed by intuition , history , background , community , and culture. He holds that sound professional judgement in the academy is informed by a firm understanding of the subject matter , an awareness of a variety of teaching methods , an ability to adapt to unforeseen scenarios , and a satisfactory level of professional confidence when making teaching and assessment decisions. Hopkins (2005) states that the academic exercise of discretion and professional judgement are most pronounced in the assessment phase since student achievement and progress often require considerable attention to the qualitative features of consistency and comparability. Hopkins' (2005) findings form the basis for the present study's association of the exogenous variable with faculty members' explicit adherence to formative assessment. The significance of formative assessment for both students and faculty can hardly be overstated (William , 2007). Formative assessment helps faculty to collect evidence about student learning directly , formulate feedback about student progress , identify student learning outcomes , and most importantly , to instantly and continuously alter and adjust their teaching and evaluation choices (Bright & Joyner , 2010). Judith (2009) particularly highlights that the role faculty members play in formative assessment revolves around recognizing , stimulating , and encouraging students' learning abilities and thinking skills.

Hopkins' (2005) arguments , however , still give weight to (and do not at all downplay) the importance of both internal and external policy standards with respect to academic discretion and professional judgement. Studying the relationship between discretion and policy standards , Ottesen And Møller (2016) define discretion as the heart of professional work and refer to the trust in the ability of certain occupational groups to make sound decisions 'on behalf' of societal authorities. They draw a line of demarcation between

professional discretion and managerialist-influenced policies hinging exclusively on control and accountability. They maintain further that the bulk of excessive policies and standards may constitute a pressure on the exercise of discretion and professional judgement in education. In their study of the reform and institutional design of higher education, Enders et al. (2013) support the view that genuine reform of the higher education system relies heavily on the degree of autonomy enjoyed by faculty members. They contend that the exercise of discretion and professional judgement by faculty members is a direct function of organizational independence and self-government. Roodt (2012) examines discretion and professional judgement in the context of modern organizations quality-assurance systems, arguing for a total quality management approach that centers on continuous improvement and self-evaluation. Roodt (2012) argues against compliance and blind adoption, insisting that constructive exercise of academic professional judgement in higher education should be guided by quality frameworks and best practices. Reviewing the role of technological advances in organizational quality assurance and evaluation system formulation, Saadatian et al. (2011) argue that effective and efficient systems of quality assurance in higher education should allow enough room for faculty freedom of expression and exercise of discretion and professional intuition. In fact, Saadatian et al. (2011) address the importance of sustainability in higher education. Assessing the strengths and weaknesses in higher educational institution evaluation theories, they associate strength with faculty member development. Vilgats and Heidmets (2011) report the impact of external quality assessment on higher education institutions, identifying faculty discretion and exercise of professional judgement as an important factor of external quality assessment. Lion (2011) examines the role of e-learning and distance education in contributing to the creativity of faculty members in terms of the extent to which faculty members are able to efficiently employ their intuition and tacit knowledge to make important teaching and assessment decisions.

Though the extant literature supports the connection of discretion with faculty development (see, e.g., McNair et al, 2020; McCallen et al, 2019; Fink, 2013; Hrnčiar and Madzik, 2013; Olsson and Roxa, 2013), it provides little in the way of empirical evidence in support of this connection. The present study undertakes to fill this gap by means of the following empirical analysis.

## Empirical Study

Adhering to a traditional scientific paradigm, the present study constitutes a quantitative analysis designed to assess the relationship between an endogenous variable associated with faculty development and an exogenous variable reflecting exercise of discretion and professional judgement. The study's population encompasses those faculty members affiliated with the bounded set of two Saudi universities, King Saud University and the Islamic University of Madinah, for which data were available. The study estimates the degree of faculty development in terms of the exercise of discretion and professional judgement:

level of faculty development =  $f$  (discretion and other exogenous variables)

The empirical analysis parsimoniously evaluates this model and reports respective parameter estimates, particularly that corresponding to the impact of degree of discretion on the level of faculty development.

A note in order. Though the level of faculty development is a complex and evolving variable that is typically explained via a wide variety of contexts including faculty specific variables such as knowledge, teaching, and research as well as organization-specific variables such as teaching load and recognition (see, e.g., Ashwin, 2021; Hoiden and Reusser, 2021), the bulk of this study is simply reduced to an association test between faculty development and discretion. In this regard and given the rather simple hypothesis development undertaken in this study, the variable of discretion may define a proxy for faculty specific variables governing the level of faculty development. The study in this fashion makes the assumption both conceptually and statistically that the

collective impact of organization-specific variables tends to cancel out to zero on average. This assumption, however, is not typically considered strong in Saudi higher education setting given the homogenous and uniform environment of Saudi higher education (Tanveer et al., 2020).

## Data collection

The dataset for this study encompasses the faculty population at King Saud University and the Islamic University of Madinah for which data records are available. The exogenous variable measuring whether a faculty member employs formative assessment is based on review of submitted course files and class reports as of January 2020. Faculty members for whom no course files or class reports were available were eliminated from the study sample. The endogenous variable measuring the number of peer-reviewed publications is reported for each included faculty member in the year 2019. Faculty members with zero or more than eight publications were eliminated from the study sample. The study sets the lower limit of one paper and the upper limit of eight papers in order to mitigate the presence of outliers and produce robust estimates of the association between the degree of faculty development and the extent to which discretion is exercised. Imposition of these limits excluded more than three quarters of the faculty member population, yielding a study sample of 1,014 faculty members.

## Variable Measurement and Coding

**Table(1)**  
Variable Measurement

Variable	Type	Mathematical Representation	Measurement
Degree of faculty development	Endogenous	Continuous	No. peer-reviewed publications in the year 2019
Exercise of discretion	Exogenous / Explanatory	Binary / Discrete	Whether formative assessment is employed

The endogenous study variable quantifying degree of faculty development is measured continuously between [1, 8]. As illustrated in Table 2, the descriptive statistics of the study variable showed central tendency measures in terms of mean of more than 4, median of 5, and mode of 6. The variable exhibited variability of a range of 7 and a variance of 5.2. The exogenous variable assessing exercise of discretion, by contrast, constitutes an affirmative/negative binary: affirmative when evidence of formative assessment is found in course files and class reports, and negative otherwise. The exogenous variable measure is coded '1' for 'affirmative', and '0' for 'negative.'

**Table(2)**  
Descriptive Statistics for the Endogenous Variable

Faculty Development	
Mean	4.630178
Standard Error	0.071915
Median	5
Mode	6
Standard Deviation	2.290009
Sample Variance	5.244143
Kurtosis	-1.23438
Skewness	-0.06753
Range	7
Minimum	1
Maximum	8
Sum	4695
Count	1014
Largest(1)	8
Smallest(1)	1
Confidence Level(95.0%)	0.141119

## Results and Discussion

This study estimates the degree of faculty development in terms of the exercise of discretion and professional judgement according to the functional form:

FF: the level of faculty development =  $f$  (discretion and other exogenous variables)

For ease of exposition , the collective impact of all exogenous variables other than discretion is assumed to cancel out and so reduce to an expected value of zero while maintaining the Gauss–Markov data generating process with well-behaved mathematical properties. The functional form thus reduces to the following specification form:

SF: The level of faculty development (i) =  $b_0 + b_1 \times \text{discretion (i)} + e (i)$

Within this specification form , the level of faculty development is the number of published peer-reviewed research papers in 2019; (i) is an index for faculty members included in the dataset;  $b_1$  is the rate of change (the derivative) pertaining to the change in the endogenous variable stimulated by a corresponding change in the exogenous variable;  $b_0$  is an intercept term that the endogenous variable collapses on whenever the exogenous variable or the derivative  $b_1$  takes the value of zero; discretion is the binary-based exogenous variable indicating adherence to formative assessment; and  $e$  is a Gauss–Markov error term with the independent and identical statistical distribution  $e \sim N(0, K)$ .

Moreover, employing binary exercise of discretion and professional judgement leads to the following models:

- M1:  $b_0 + b_1$  if the faculty member applies formative assessment.
- M2:  $b_0$  if the faculty member doesn't apply formative assessment.

The coefficients can be interpreted according to the following system:

- S1:  $b_0$  is the average number of peer-reviewed papers published by faculty members who do not apply formative assessment and hence don't exercise discretion.
- S2:  $b_0 + b_1$  is the average number of peer-reviewed papers published by faculty members who apply formative assessment and hence exercise discretion.
- S3:  $b_1$  is the average difference in published peer-reviewed papers between the two types of faculty members.

As outlined in Table 3, statistical regression strongly rejects the null hypothesis that discretion has no impact on faculty development and supports the alternative hypothesis that discretion has a positive and well-pronounced impact on faculty development, with a  $b_1$  parameter estimate of 3.36 that is significant at all conventional levels. The regression holds an explanatory power of almost 72% that is also significant at all conventional levels.

The results show that whereas faculty members who don't exercise discretion produce about two yearly papers on average, faculty members who exercise discretion produce a total of almost six papers a year on average. In the context of the present study, in which publication serves as the indicator of development, the results suggest that the development of discretion-utilizing faculty members significantly exceeds that of their non-discretion-utilizing colleagues.

Though this study produces empirical evidence clearly favoring the positive impact of discretion on the level of faculty development, future research studies may include more exogenous, right-hand side variables with the objective of parsimoniously specifying the level of faculty development.

The results of this study, however, corroborate well with the extant literature on the subject. For instance, Spreitzer and Porath (2012) establish that exercise of discretion is prerequisite for sustainable performance. McLean and Ashwin (2016) document that exercise of professional judgement

supports typical faculty activities of teaching, research, and curriculum development. Popovic and Plank (2016) maintain that exercising discretion and professional judgement defines a requirement for leading change in modern higher education settings. Lee and Choy (2020) show that exercise of discretion and professional judgement is key for the professional development of early career academics. Van Dijk et al. (2020) report that exercise of discretion and professional judgement is a strong reflection of the level of expertise faculty members tend to possess. Greer et al. (2021) conceptualize the exercise of professional judgement among the professional standards via which the levels of faculty research, teaching, and self-efficacy can be improved. Ashwin (2021) supports that faculty exercise of professional judgement is critical for student-centered learning environments, which go a long way with knowledge sharing in higher education settings.

**Table(3)**  
Regression Statistical Output

REGRESSION ON

Regression Statistics	
Multiple R	0.7199236
R Square	0.51829
Adjusted R Square	0.517814
Standard Error	1.5901736
Observations	1014

ANOVA

	df	SS	MS	F	Significance F
Regression	1	2753.32074	2753.321	1088.849	1.1E-162
Residual	1012	2558.99583	2.528652		
Total	1013	5312.31657			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	2.5970149	0.07931065	32.74485	6E-161	2.441383	2.752647	2.441383	2.752647
Discretion	3.3686713	0.10208802	32.99772	1.1E-162	3.168343	3.569	3.168343	3.569

## Concluding Remarks and Limitations

The present study produces a parameter estimate pertaining to the difference in the level of faculty development between faculty members exercising discretion and those not exercising discretion of 3.36. The estimate is statistically significant at all levels. The regression specifying faculty development in terms of exercise of discretion has an explanatory power of 72% and is likewise significant at all conventional levels. The empirical output of this study clearly supports the hypothesis that faculty exercise of discretion has a formidable positive impact on the level of faculty development. The study therefore reiterates findings and propositions from the extant literature regarding the role of faculty exercise of discretion and professional judgement for their levels of development and effectiveness (see, e.g., Bell and Mladenovic, 2008; Bamber and Stephani, 2016; Jongbloed et al., 2018; O'Donnell and Sadier (2021). In particular, Hargreaves (2002) contend that teacher exercise of discretion and professional judgement is pivot for the formulation of effective teaching and research solutions in modern knowledge societies. Bass and Glaser (2004) argue that faculty exercise of discretion and professional judgement is associated with effective assessment of learning. Bruniges (2005) proposes that exercise of teacher professional judgement is a prerequisite to teacher participation in meaningful curriculum development activities. Taylor et al. (2017) establish that exercise of professional judgement is indispensable for work decisions and assessment of work-related risk factors.

The explanatory power of these results is limited by variable measure and ease of exposition. There exist numerous ways of representing the theoretic constructs (faculty development and exercise of discretion) examined in this study; one limitation of the study involves its having adopted only one of these representation schemes. A second limitation of the study involves its election of ease of empirical exposition over tractability. Such ease of empirical exposition applies to the assessment of faculty development; such development is a compound variable that may be specified more

rigorously than undertaken here through the inclusion of additional right-hand variables broadly categorizable, in accordance with Roodt (2012), into institutional and non-institutional. A third limitation is the choice of measuring the variable faculty development in terms of the number of peer-review publications. Indeed, there exists a host of ways and proxies via which the level variable of faculty development can be measured (see, e.g., Beach et al., 2016; Condon et al., 2016). Future research is recommended in this regard to explore the same subject while employing different measurements of the study variables. Moreover, future studies may choose to measure the study variable of faculty development on a discrete basis as opposed to the continuous basis employed in this study. Toward this end, Gatti and Mcavoy (2017) advocate faculty ethical thinking as a measure of the level of faculty development. Hess and Mcavoy (2015) employ democratic teaching as a measure of the underlying level of faculty development. Ho and Seow (2015) and Zimmerman and Robertson (2017) measure the level of faculty development in terms of the willingness of faculty to teach controversial issues.

Nevertheless, this study explicitly expands on the role of faculty exercise of judgement based on past professional experience and personal intuition (i.e., discretion), a role largely unaddressed in the extant empirical literature. To this extent, the discerning reader may consider the results of this study an output of a test of association between faculty development and exercise of discretion and professional judgement. Toward this end, future studies addressing the relationship between faculty development and faculty exercise of discretion and professional judgement are encouraged to employ theoretical models of the level of faculty development where the relationship of interest in this study is investigated alongside linear relationships between faculty development and all other explanatory variables instructed by the models.

## References:

Ashwin , P. (2020). *Transforming university education: A manifesto*. London: Bloomsbury.

Ashwin , P. (2021). How student-centered learning and teaching can obscure the importance of knowledge in educational processes and why it matters. In S. Hoidn , & Klemenčič (Eds.) , *Routledge international handbook of student-centered learning and teaching in higher education* (pp. 65–74). London: Routledge.

Bamber , V. , & Stefani , L. (2016). Taking up the challenge of evidencing value in educational development: From theory to practice. *International Journal for Academic Development* , 21(3) , 242–254.

Beach , A. L. , Sorcinelli , M. D. , Austin , A. E. , & Rivard , J. K. (2016). Faculty development in the age of evidence: Current practices , future imperatives. Sterling , VA: Stylus Publishing.

Bell , A. , & Mladenovic , R. (2008). The benefits of peer observation of teaching for tutor development. *Higher Education* , 55(6) , 735–752.

Bruniges , M. (2007). Teacher professional judgement in teaching and learning decisions. In

Capano , G. (2010). A Sisyphean task: Evaluation and institutional accountability in Italian higher education. *Higher Education Policy* , 23(1) , 39–62.

Collins , S. B. (2016). The space in the rules: Bureaucratic discretion in the administration of Ontario works. *Social Policy and Society* , 15(2) , 221–235.

Condon , W. , Iverson , E. R. , Manduca , C. A. , Rutz , C. , & Willett , G. (2016). Faculty development and student learning: Assessing the connections. Bloomington , IN: Indiana University Press.

DiLeo , J.R. (2015). Transparency in neoliberal academe. *Symploke*, 23 (1-2) , 341-362.

Dodge , J. (2009). *25 quick formative assessments for the differentiated classroom*. Scholastic.

Dylan , W. (2007 , January). Keeping learning on track: Formative assessments and the regulation of learning. [https://www.researchgate.net/publication/252646685\\_Keeping\\_learning\\_on\\_track\\_Formative\\_assessment\\_and\\_the\\_regulation\\_of\\_learning](https://www.researchgate.net/publication/252646685_Keeping_learning_on_track_Formative_assessment_and_the_regulation_of_learning)

Enders , J. , de Boer , H. , & Weyer , E. (2013). Regulatory autonomy and performance: The Reform of higher education re-visited. *The International Journal of Higher Education and Educational Planning*, 65(1) , 5-23.

Fink , L. Dee (2013). The Current Status of Faculty Development Internationally. *International Journal for the Scholarship of Teaching and Learning*, 7(2) , 45-62.

Gatti , L. , & Mcavoy , P. (2017). Ethical thinking in the profession of teaching survey (Unpublished raw data).

Greer , D. , Cathcart , A. , & Swalwell , G. (2021). Compounding the impact of teaching development programs in China and Hong Kong SAR: Using the professional standards framework to deepen learning and improve teaching self-efficacy. *International Journal for Academic Development*, 26(4).

Hess , D. E. , & Mcavoy , P. (2015). The political classroom: Evidence and ethics in democratic education. New York: Routledge.

Ho , L.-C. , & Seow , T. (2015). Teaching Controversial Issues in Geography: Climate Change Education in Singaporean Schools. *Theory & Research in Social Education* , 43(3) , 314-344.

Hoidn, S., & Reusser, K. (2021). Foundations of student-centered learning and teaching. In S. Hoidn, & M. Klemenčič (Eds.), Routledge international handbook of student-centered learning and teaching in higher education (pp. 17–46). London: Routledge.

Hrnciar M, Madzík P (2013). Improving the quality of higher education in central Europe: Approach based on GAP analysis. *Higher Education Studies* 3(4), 75–88

Jimenez, M. F., Laverty, T. M., Bombaci, S. P., Wilkins, K., Bennett, D. E., & Pejchar, L. (2019). Underrepresented faculty play a disproportionate role in advancing diversity and inclusion. *Nature Ecology & Evolution*, 1.

Jongbloed, B., Vossensteyn H., Vugt F., Westerheijden D.F. (2018). Transparency in higher education: The emergence of a new perspective on higher education governance. In Curaj, Deca, & Pricopie (Eds.) European Higher Education Area: The Impact of Past and Future Policies. Springer.

Kezar, A., & Posselt, J. (Eds.). (2019). Higher education administration for social justice and equity: Critical perspectives for leadership. Routledge.

Khelifi, S., Triki, M (2020, January 2). Use of discretion on the front line of higher education policy reform: The case of quality assurance reforms in Tunisia. *Higher Education*. <https://doi.org/10.1007/s10734-019-00497-y>

Kyaw, A. (2020). U of Michigan to hire 20 tenure-track faculty as part of anti-racism initiative. <https://diverseeducation.com/article/196795/>

L.A. Lim, L.F.J. Choy (2014). Preparing staff for problem-based learning: outcomes of a comprehensive faculty development program. *International Journal of Research Studies in Education*, 3(3), 53–68.

Lindholm, J.A. (2004). Pathways to the professoriate: The role of self, others, and environment in shaping academic career aspirations. *The Journal of Higher Education*, 75(6), 603–635.

Lion, R. W. (2011). A study of performance support in higher education. *Performance Improvement Quarterly*, 24(1), 49–67.

McCallen, L. S., & Johnson, H. L. (2019). The role of institutional agents in promoting higher education success among first-generation college students at a public urban university. *Journal of Diversity in Higher Education*.

McLean, M., & Ashwin, P. (2016). The quality of learning, teaching, and curriculum. In Scott, P., Gallacher, J., & Parry, G. (Eds.), *New Languages and Landscapes of Higher Education* (pp. 84–102). Oxford: Oxford University Press.

McNair, T. B., Bensimon, E. M., & Malcom-Piqueux, L. (2020). From equity talk to equity walk: Expanding practitioner knowledge for racial justice in higher education. John Wiley & Sons.

O'Donnell, J.L., Sadlier, S.T. (2021). University as Secret Society: Becoming Faculty Through Discretion. *Soc* 58, 213–220.

Olsson, T. & Roxå, T. (2013). Assessing and rewarding excellent academic teachers for the benefit of an organization. *European Journal of Higher Education*, 3(1), 40– 61.

Ottesen, E., & Møller, J. (2016). Organizational routines: The interplay of legal standards and professional discretion. *European Educational Research Journal*, 15(4), 428–446.

Ozga J., Dahler-Larsen P., Segerholm C. & Simola H. (2011). Introduction. In J. Ozga, P. Dahler-Larsen, C. Segerholm, & H. Simola (Eds.), *Fabricating quality in education: Data and governance in Europe* (pp. 1–9). Routledge.

Peters, M. (2005). The new prudentialism in education: Actuarial rationality and the entrepreneurial self. *Educational Theory*, 55(2), 123–137.

Popovic, C., & Plank, K. M. (2016). Managing and leading change: Models and practices. In D. Baume, & C. Popovic (Eds.), *Advancing practice in academic development* (pp. 207–224). London: Routledge.

Ratka A, Zorek JA, Meyer SM (2017). Overview of faculty development programs for Interprofessional education. *Am J Pharm Educ*, 81(5), 1-10.

Roodt, J. (2012). Institutional quality assurance: Does a perfect framework exist? *Arab Journal for Quality Assurance in Higher Education*, 5(10), 156–173.

Saadatian, O., Dola, K. B., Salleh, I., & Tahir, O. (2011). Identifying strength and weakness of sustainable higher educational assessment approaches. *International Journal of Business and Social Science*, 2(3), 137–146.

Saroyan, A. and Frenay, M. (2010). *Building Teaching Capacities in Higher Education: A Comprehensive International Model* (eds). Sterling, VA: Stylus.

Shaw, R.A. (2011). Employing universal design for instruction. *New Directions for Student Services*, 134(1), p. 21–33.

Spreitzer, G.; Porath, C. (2012). Creating Sustainable Performance. *Harvard Business Review*, Jan–Feb.

Tanveer, M.; Bhaumik, A.; Hassan, S.; and Haq, I.U (2020). Covid-19 Pandemic , Outbreak Educational Sector and Students Online Learning in Saudi Arabia. *J. Entrep. Educ.* 23, 1–14.

van Dijk, E., van Tartwijk, J., van der Schaaf, M., & Kluijtmans, M. (2020). What makes an expert university teacher? A systematic review and synthesis of frameworks for teacher expertise in higher education. *Educational Research Review*, 31, 1–16.

Vilgats, B. & Heidmets, M. (2011). The impact of external quality assessment on universities: The Estonian experience. *Higher Education Policy*, 24(3), 331-346.

Winkelmes, M.A., Bernacki, M., Butler, J., Zochowski, M., Golanics, J., & Harriss Weavil, K. (2016). Teaching intervention that increases underserved college students' success. *Peer Review*, 18(1/2), 31-36.

Zimmerman, J., & Robertson, E. (2017). The case for contention: Teaching controversial issues in American schools. Chicago: University of Chicago Press.