Leading and Managing Research in a Post-Soviet Central Asian Research University

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By

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PREFACE

The Union of Soviet Socialist Republics (USSR) had its higher education structure with its qualification framework, research philosophy and practices which distinguished itself from the rest of the world. The dissolution of the USSR in 1990 left fifteen countries independent, and most of them started and embarked on the process to reimagine their educational and research practices as a response to globalisation and internationalisation. The process led to some countries showing a willingness to adopt Western practices in education and research.

Kazakhstan, which was the last of the fifteen to leave the union in 1991, took the initiative to adopt the Bologna Process in 2010, a clear indication that it wants to transition its education and research practices from those of the Soviet Union to a Western approach. This was done taking into account the goal of Kazakhstan to be in the top thirty developed nations in 2050, as espoused in the strategic addresses of the first president of Kazakhstan, Mr. Nursultan Nazarbayev.

Since then, Nazarbayev University has been established to be a springboard for the changes. It was consequently declared a research university that was to cascade Western forms of education practices and scientific research to other universities. The Western forms of research organisation, execution, management and administration were initiated through partnerships with highly ranked universities such as the University of Pennsylvania, Cambridge, Duke, Wisconsin Madison and others.

In the process of internationalisation or westernisation of Kazakhstan higher education issues of research strategic planning, research culture, research productivity, research quality and evaluation, research internationalisation and collaboration, ethics in research, research partnerships, and doctoral and postdoctoral research were foregrounded as part of the transformation and reforms aimed at making sure that education and research practices emulate those in the west. Since then, Nazarbayev University has now been ranked in the top 30% of the world's prestigious research universities, and this is an opportune moment to reflect on its journey, particularly in research development.

This monograph, therefore, represents a comprehensive reflective account by the two vice deans of research who became instrumental in the development of research structure, research culture and research practices at an international university in Kazakhstan.

Professor Tsediso Michael Makoelle, the longest-serving vice dean for research at the Nazarbayev University Graduate School of Education, and a professor of inclusive education and educational leadership brings to the discussions in this monograph a wealth of experience in research leadership, management and administration that contributed in shaping research discourse at the Graduate School of Education and the university in general.

Professor, Riccardo Pelizzo, also the longest-service vice dean for research and academic affairs at the Nazarbayev University Graduate School of Public Policy, and a professor of political science participated in building the research at the graduate school and the university in general bringing critical and qualified insights into research development in a young university in post-soviet space.

Therefore, the combination of the two authors constitutes a formidable team in that their rich reflections about their involvement in the building of research at Nazarbayev University epitomise the richness and depth of research development at an emerging university.

Be that as it may, the theoretical approach in this monograph is premised within the parameters of the theory and practice dichotomy. It is grounded in the principles of autoethnography wherein the author's lived experiences are connected to the wider social and political discourses in research leadership, management and administration at a university which is at a crossroads or in the process of critical reforms of its educational and research identity and practices. Therefore, in this monograph, a combination of theory and the review of literature as well as the analysis of lived experiences through critical reflections, are done to provide a theoretical and practical context from which the arguments are framed in order to harvest recommendations for effective research leadership in an evolving university in a post-soviet context.

This monograph, therefore, aimed to analyse the critical reflections of those who took part in the research development process. This process, therefore, entails theorising about research development in an emerging university within the post-Soviet space.

As a result, the monograph makes a valuable contribution to the development of research structures, culture and practices. The insights and lessons emerging from this monograph are critical for other universities affected by globalisation and Westernisation of their education and research practices. This monograph could make an interesting read to university leaders, presidents, rectors, provosts, administrators, research managers, research scholars and students in higher education, both in post-Soviet and other international contexts.

<div align="right">T. Makoelle and R. Pelizzo</div>

ABOUT THE AUTHORS

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Tsediso Michael Makoelle is a Full Professor and Dean of the Faculty of Education at the University of Fort Hare, in the Eastern Cape Province of South Africa. He is a visiting fellow at the International Laboratory of the Social Integration Research of National Research University Higher School of Economics, Moscow, Russia. Previously he held various positions in South Africa abroad. Prof Makoelle worked at Nazarbayev University for nearly ten years as a full professor, associate professor, then Director of Doctoral Studies, General Director for Research, and Vice Dean for Research at the Graduate School of Education. He has notably worked as lecturer, Senior Lecturer and Centre Coordinator at the Cape Peninsula University of Technology, Cape Town, the University of Johannesburg and the University of Free State, South Africa.

He is a distinguished scholar, having been awarded the prestigious Nelson Mandela Scholarship to the United Kingdom (UK). He holds the degrees of Doctor of Philosophy (PhD) in Inclusive Education from the University of Manchester, UK, and a Doctor of Education (D Ed) in Education Management and Leadership from the University of South Africa (UNISA).

Prof Makoelle's teaching and research experience spans over 30 years, with the focus being on secondary and higher education. At the beginning of his career, Prof. Makoelle started his pedagogical work as a high school teacher and then head of department, vice principal and principal in several secondary schools in the Education Department of the Republic of South Africa.

He has written and published extensively on inclusive education, educational leadership, management, governance, and administration for national and international audiences and readership. Prof Makoelle has supervised many Master's and PhD students. He is a member of several international research bodies. He reviews grants and funding applications for the South African National Research Foundation (NRF), reviewed papers for several international Scopus and Web of Science journals and evaluated research theses for several universities in South Africa and abroad. He has also reviewed postgraduate courses and programmes for many universities and served on several international journals' editorial boards. He has collaborated with universities from Russia, the US, the UK, Europe, and Africa. He is passionate about educational leadership and inclusive education with research interests in school leadership, school effectiveness and improvement and inclusive pedagogy in countries of the South and beyond. He has devoted his research work to the framework of Participatory Action Research, which is informed by notions of critical, reflective practitioner, and transformative epistemologies.

Prof. Riccardo Pelizzo (PhD)

Riccardo Pelizzo is a Professor and Vice Dean for Academic Affairs at the Graduate School of Public Policy at Nazarbayev University. Dr Pelizzo is an internationally recognized political development specialist. Dr Pelizzo's research focuses on issues of political development, institutional reform and institutional performance in developing countries. After designing measures and benchmarks for assessing parliaments' capacity and performance, he is currently devising several diagnostic tools to measure political stability and other dimensions of good governance.

Dr Pelizzo is the Associate Editor of Politics and Policy. He is the recipient of several fellowships, scholarships, competitive grants and awards. In addition to editing 3 volumes, Dr Pelizzo has authored 7 monographs and more than 50 peer-reviewed articles. His studies have appeared or been translated into 11 languages (Arabic, Bahasa, Chinese, English, French, German, Italian, Russian, Spanish, Kazakh and Vietnamese).

In addition to keeping an active research agenda, he has engaged academic and non-academic audiences in 25 countries and has provided expert opinion to constitutional drafters, institutional reformers, and legislatures in developing countries from Africa, Asia and the Pacific region.

Chapter 1

Introduction: Towards a World-Class Research University

Tsediso Michael Makoelle

Abstract

This chapter provides an overview of the development of world-class research universities. The aim, objectives, and methodological approaches to the manuscript are outlined to introduce a comprehensive orientation of the monograph. Auto-ethnography as an inquiry approach adopted in this monograph is conceptualised, and its operationalisation is detailed. The chapter provides an executive summary that gives snapshots of the contents of the chapters.

Keywords: Auto-ethnography, Autobiography, Storytelling, Narratives, Collaborative-Auto-ethnography

Introduction

Many countries develop international universities for several reasons. Among the main justifications is that countries' social and economic development is influenced by how well those countries stimulate innovation and thus the translation of new ideas into the manufacturing of goods and services. Most developed nations spend more than 2% of their GDP on funding research. There has been an accelerated pace of developing international research universities in developing countries in Africa, Asia and Latin America as a drive to boost economic and social development. There is a process to establish international research universities or open satellite campuses of already established universities in developing nations. The collapse of the Soviet Union has seen the sprouting of such universities as post-

Soviet countries seek to internationalise their education. According to Horta (2009), the transformation of the higher education sector through the internationalisation process ensures the global competitiveness of higher education in each country, which has an impetus on human development and thus the economic growth of such countries.

In this chapter, I review the literature to conceptualise the notion of a world-class university and an international research university. I then provide a comprehensive orientation about the monograph. The aim, objectives, and methodological approach are outlined. Auto-ethnography as an inquiry approach adopted in this monograph is conceptualised, and its operationalisation is detailed.

The Notion of a World-Class University

In defining a world-class university, Altbach (2003) postulates that the general understanding would be that a world-class university is ranked among the foremost in the world. It is characterised by research excellence, an impactful contribution to new knowledge production. Altbach (2003) avers that other university aspects, inclusive of human and physical, should create such conditions that are possible and achievable. Academic freedom must be guaranteed, with intellectual stimulation, shared governance and adequate funding.

In analysing the justifications for the establishment of a world-class university, Altbach & Salmi (2011) posit that the historical emergence of world-class universities culminated from the need for economic development and the need to deliver a globally competitive education as a result of globalisation.

However, various countries adopt various methods and approaches to developing world-class universities. For instance, Huang (2015) states that the development of world-class universities in China was characterised by a top-down policy approach supported by extensive government funding. Conversely, Song (2018), using China as a case study, contends that transforming local universities into world-class universities was accompanied by many challenges. i.e. the need to reform personnel to comply with international benchmarks, more emphasis on STEM fields at the expense of social sciences and humanities, selecting and recruiting students who have had international study experience, admission of international students being seen as competition for spaces by locally based students and the existence of contradictions between local and international practices and academic culture. In South Korea, the establishment of world-class universities emanated from a special project called Brain Korea (BK21), which was an established

project to fund research and increase publications in mainly four South Korean universities, i.e. Yonsei, Korea, Sungkyunkwan and Hanyang (Shin, 2009).

According to Isaacs (2015), the development of higher education can, to a great extent, be influenced by geographic proximity and the regional background of countries. Central Asia is one region with similar attributes and is composed of Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and Kazakhstan. However, different Central Asian countries have embarked on higher education transformation, albeit at different paces. Various approaches have been employed to enhance regional higher education cooperation, e.g. initiatives such as the University-led Research Consortium Networks (URCN) aimed at achieving an economic spillover to regional higher education partners (Pillai, Sindila & Nagornova, 2018).

According to Mukhitdinova (2015), in Central Asia, higher education reform is impacted by low levels of investment. Sagintayeva & Kurakbayev (2013) argue that the five Central Asian countries pursue higher education transformation by choosing different pathways. This is echoed by Merril (2010), who describes the evolution of higher education reforms and the establishment of research universities in post-Soviet Central Asia as a mixed process. She further identified several factors which impacted the differences between the five Central Asian countries, i.e. Unequal economic strengths, political systems (maturity of democracy), lack of academic freedom and autonomy, entrenched soviet practices and the pace of the implementation of the Bologna Process. Among these countries, Kazakhstan has adopted the Bologna Process and moved swiftly to adopt the Western form of higher education. The Bologna process later had a significant impact on how higher education was to be organised.

However, be that as it may, the process of establishing world-class universities always starts with an impetus to research funding, research development and research production. Research becomes the main driver to climb the ladder of university rankings. As such, world-class universities become research-intensive universities. Several research universities in Central Asia were established.

The World-Class Research University

The concept of a research university first came into existence in Germany in the nineteenth and twentieth centuries due to market forces and bureaucracy (Clark, 2019). On the other hand, Altbach (2007) conceptualise a research university as a 21st-century institution that conducts globally competitive basic or applied research. They are considered expensive to develop and

support. They are known for their significance in impacting innovations through research and thus influencing the economic and social development of countries. This, according to Altbach (2013), includes aspects of student and faculty mobility, the use of modern technologies and sophisticated collaborative networks within the global knowledge economy.

Research universities are at the centre of sustainable development (Waas, Verbruggen & Wright, 2010). Because they are poised to accelerate development, Arocena, Goransson & Sutz (2015) evoke the notion of a 'developmental University' which is meant to foster inclusive development and democratise knowledge practices, thus being transformative and change-oriented. Mohrman, Ma & Baker (2008) introduce the notion of the Emerging Global Model (EGM) which sees a research university as a 21st-century institution in the upper stratum characterised by eight attributes i.e. global mission, research intensity, new role for professors, diversified funding, worldwide recruitment, increasing complexity, new relationships with industry and global collaborations and partnerships.

However, according to Adham et al (2015), the development and management of a research university, particularly in developing nations, can be compounded by the absence of an appropriate funding model. The management is complex as these universities focus on research, teaching, and services, but also other aspects such as commercialisation.

Research Questions

Given the literature review and background, the questions that are asked in this volume are:

- How are world-class research universities conceptualised? How do these conceptualisations apply to a post-Soviet Central Asian context?
- How is research in world-class research universities managed and led? How are such strategies applicable in the post-Soviet Central Asian context?
- And how can newly established research universities in the post-Soviet Central Asian context use research to contribute to making them world-class?

The objectives

The objectives of this monograph are therefore to conceptualise a world-class university in an evolving and transforming education context, in this

case, the post-Soviet Central Asian context. The discussion in this volume also illuminates how research is managed and led in an evolving university within the changing educational context. The role of research in the development of a world-class research university is discussed, and recommendations are made in each chapter about how to develop research as part of building a world-class university. To address these objectives, we adopted a collaborative autoethnography.

Research Design

In this manuscript, we adopted auto-ethnography as our research design. Denshire (2014:1), quoting Sparkes (2000), postulates that "auto-ethnography can be highly personal accounts that draw upon the experiences of the author/researcher for the purpose of extending sociological understandings." In this way, Denshire (2014) avers that auto-ethnography is writing oneself into one's work while challenging the assertions about silent authorship, i.e. excluding the author's views from the research findings.

According to Chang (2008), auto-ethnography is a process of producing knowledge through understanding the self, embarking on reflections to produce narratives that could be analysed. While auto-ethnography is critiqued for the closeness of the researcher to the subject being studied, and lack of objectivity, Hayano (1979 enumerates several reasons why auto-ethnography can be useful in studying post-colonial contexts, i.e. understanding issues from the local people's perspectives. It can also reduce the distortions (Muncey, 2005) as the own group or context is being studied. If well conducted, it can also be a cost-effective method.

Adams, Ellis & Jones (2017:1) disentangle auto-ethnography in the following way:

Auto	Use of personal experience
Ethno	Cultural texts, experiences, beliefs and practices
Graphy	Describing and interpreting

Therefore, the use of personal experience to describe and interpret cultural text, experiences, beliefs and practices constitutes auto-ethnography. Adams, Ellis & Jones (2017) state that auto-ethnography became known in the 1970s and focused on cultural members attempting to understand their own culture. It is grounded in personal storytelling and personal narratives. Jones, Adams and Ellis (2016) postulate that auto-ethnography allows subjectivity and emotionality, which are often ignored and unaccounted for in

positivist studies. According to Wall (2006), reflexivity is the main underlying tenet of auto-ethnographic studies.

Lapadat (2017) believes that auto-ethnography has ethical intent as it addresses the issue of "representing speaking for or appropriating the voices of others" (p1). However, Lapadat (2017) cautions that the distance between the subject and the researcher can cause an ethical challenge.

Collaborative Auto-Ethnographic Research Design

Because of our collaboration as two authors, collaborative auto-ethnography was applied. Lapadat (2017), quoting Chang et al (2013) define collaborative auto-ethnography as auto-ethnographic research conducted by two or more researchers. It is a qualitative method that combines the auto-biographical study of self with ethnographic analysis of the sociocultural milieu within which the researchers are situated. Lapadat (2017) suggests that collaborative auto-ethnographic research is applied as it differs from solo auto-ethnographic research, and it addresses ethical challenges. Therefore, as a result, there has been a shift from solo to collaborative auto-ethnographic research. Furthermore, Lapadat (2017) postulates that collaborative auto-ethnographic research ensures that the clarity of memories and events is corroborated by researchers more precisely. The interpersonal analysis of autobiographies increases the research rigour.

The following are described by Lapadat (2017) as steps used to conduct an Auto-ethnographic research:

- Forming a team;
- Deciding on research focus;
- Collecting data;
- Analysis and interpretation; and
- Writing and application.

As a result, collaborative auto-ethnography has several benefits, i.e. it can ensure that the multi-perspective analysis ensues, research rigour, reduction of bias and ethical dilemmas, ensure rigorous data analysis, team building and ensure that the outcomes of research can lead to practical solutions and interventions. It can also address issues of marginalisation and social justice.

The executive summary below accounts for the reflections and narratives as observed by the two authors of the monograph.

Executive Summary

- **Chapter 1-Introduction: Towards a World-Class Research University**

The introductory chapter provides an overview of the development of world-class research universities. The aim, objectives, and methodological approaches to the manuscript are outlined to introduce a comprehensive orientation of the monograph. Auto-ethnography as an inquiry approach adopted in this monograph is conceptualised, and its operationalisation is detailed. The chapter provides an executive summary that gives a snapshot of the contents of the chapters.

- **Chapter 2: Research Leadership, Management and Development**

Discusses the character of research universities as institutions with robust research leadership. It unpacks the belief that effective research institutions have effective leadership and are constantly embarking on research development processes to improve the quality of their research. The chapter defines research leadership's role, significance, and impact in building a strong research university. It analyses the current state of research leadership and highlights how research leadership has evolved research universities within the post-Soviet context.

- **Chapter 3: Developing a Strategy and Building an Institutional Research Identity**

The Influential nature of research-intensive universities and the relationship between their good research strategies and research identity are discussed. Chapter two discusses aspects of university research strategic planning, research strategy development, stating research goals and priorities, development of research infrastructure, and the implementation of the research strategic framework. The chapter makes reflections on strategy development at an international university in post-Soviet Kazakhstan in order to make recommendations about strategy and research identity development in transforming the academic environment.

- **Chapter 4: Research Culture and Research Practice**

In this chapter, the vibrancy of research culture as a cornerstone of good research practice is foregrounded. This chapter conceptualises research culture and discusses how an influential research culture evolves. Factors promoting or hindering the development of an influential research culture are

highlighted, i.e., research visibility and research dissemination. The chapter concludes by unmaking some of the critical nuances of managing the process of research culture development.

- **Chapter 5: Research Administration**

In the chapter, the characteristics of universities that perform well in research in relation to their effective administrative procedures, rules, and processes are highlighted. Chapter four defines the notion of research administration. Elaborate on the development of the research organisational architecture. The discussions in this chapter are framed within the parameters of grant and funding management, i.e., pre-award, award, and post-award—the research decision-making process and oversight.

- **Chapter 6: Research Productivity, Assessment, Evaluation and Monitoring**

This chapter discusses top research universities' attributes, such as their high research productivity, effective mechanisms to promote research productivity and their assessment of research quantity and quality. The chapter provides a comprehensive overview of research productivity, assessment, evaluation and monitoring processes. In this chapter, recommendations are made about how to manage research quality and quantity.

- **Chapter 7: Internationalisation of Research and Research Collaboration**

In this chapter, the importance of working with and through international collaborations as a process that enhances the chances of research success is outlined. This chapter conceptualises the notions of research internationalisation and international collaborations. The process through which the internationalisation of research and the role of international collaborations evolve is foregrounded. The chapter also discusses how those could be developed within the post-Soviet context.

- **Chapter 8: Ethics and Standards of Research**

The chapter discusses the significance of maintaining high research ethical standards, ensuring high research quality, and guaranteeing a research reputation. In chapter seven, the notion of research ethics is conceptualised. Developing practical ethical standards and procedures is mapped out in the context of policies, structures, and research integrity. The challenges,

threats, and opportunities of building a culture of ethical research within a post-Soviet environment are highlighted.

- **Chapter 9: Research Partnerships**

This chapter discusses the role of research partnerships in building a research university. For research-intensive universities to develop an effective research compact, it is necessary to have partners who are willing to invest in research partnerships. This chapter defines the notion of a research partnership and how it is initiated and developed. This chapter analyses how research partnerships have evolved. Their role in building an adequate research infrastructure is elaborated upon.

- **Chapter 10: Doctoral Research**

In this chapter, it is argued and demonstrated how doctoral research is the pride of research universities. Chapter nine provides a comprehensive account of leading and managing doctoral research as part of the broader school and university-wide research. The role of doctoral research in overall institutional research is pointed out. The role of mentoring doctoral research is discussed within STEM and NON-STEM research perspectives.

- **Chapter 11: Post-doctoral, Visiting Scholars and Research Fellows**

The chapter contextualises how auxiliary research staff, such as post-doctoral, visiting scholars, professors, and fellows, may positively impact research. This chapter, therefore, discusses the significance of additional research staff. In this chapter, the discussions are centred on the role such staff could play in various aspects of research, such as research productivity, mentoring, and capacity building.

- **Chapter 12: Research Leadership, Reputation Management, University Rankings and Research Metrics**

In this chapter, the role of the development of research universities not only focuses on the development of structures, strategies, visions, missions and strategic goals but also on the enhancement of institutional reputation, visibility and recognition is elaborated upon. In this chapter, the influence of university ranking on the development of an evolving research university is conceptualised. A comprehensive literature review is done to put the discussion into an international perspective. Reflections are made based on the author's experiences, and suggestions are made about how university

rankings as a tool can help shape the research productivity and reputation of an evolving research university in a transforming educational context.

- **Chapter 13-Conclusion: Research Management in evolving Research Universities, Past, Present and Future**

In this chapter, the lead author summarises the findings from the previous chapters. Lessons are drawn in order to synthesise the main findings of the volume. The chapter provides the conclusion by providing recommendations for the development of a world-class research university in an evolving, changing and transforming education context.

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CHAPTER 2

RESEARCH LEADERSHIP, MANAGEMENT AND DEVELOPMENT

TSEDISO MAKOELLE

Abstract

Research universities are known for robust research leadership. It is believed that effective research institutions have effective leadership and are constantly embarking on research development processes to improve the quality of their research. This chapter defines research leadership's role, significance, and impact in building a strong research university. This chapter analyzes the current state of research leadership and highlights how research leadership has evolved research universities within the post-Soviet context.

Keywords: Research Leadership, Research Management, Research Development, University Governance, Leadership

Introduction

Leadership has become a critical aspect of university management and governance. In the context of a research university, the notion of leadership can be attributed to performativity and the ability of the institution to achieve set priorities and goals. In the higher education context, leadership is mainly the non-positional exercise of influence by those who produce knowledge to influence the level of institutional innovation and research output. However, leadership may also be positional as institutions of higher learning are characterized by an academic hierarchy that ensures they function and achieve their mandate as academic entities. The universities are moving towards an entrepreneurial approach to leadership; as such, the leaders are expected to generate institutional income and increase their financial

endowments. As such, academic leadership is lately taking a business model. As such, leadership requires an exercise of influence to achieve the institutional goals.

On the other side, leadership not only ensure the achievement of strategic goals but also development. Development is the flip side of leadership as it is a concept associated with the process of putting in place structures, procedures and policies that are aimed at improving institutional productivity and effectiveness. Therefore, leadership is needed to stimulate innovation and thus development. However, leadership and development cannot be static as they evolve based on the establishment of new goals and priorities based on the institutional directions.

Therefore, in this chapter, I attempt to define the concept of research leadership, management and development in the context of an evolving research institution. The following research question guided my reflections: What is research leadership, management and development in the context of an evolving research institution in an educationally transforming institution, e.g. post-Soviet context?

In order to answer this research question, a comprehensive literature review on research leadership, management and development is made. The author shares reflections on the processes of developing a research-intensive institution in a post-Soviet context. Lessons are drawn and suggestions are made regarding research leadership, management and development in an evolving research institution.

The notion of Research Leadership, Management and Development

Evans (2014) defines research leadership as the ability of others to influence research behaviour, attitude and intellectual capacity. The measure of research leadership is increased funding and improved rankings or recognition. Evans postulates that research leadership can be provided by anyone because it is not positional or tied to academic level or rank.

According to Ball (2001), research leadership may be formal or informal and can encompass self-leadership but also relations with people, which may lead to transactional, collaborative or participatory research leadership. On the other hand, Owusu et al. (2017) research leadership may require what they call a 'human touch', which is premised on principles of task-centredness, and democratic and participatory leadership models. This supports Jackson's (2008) assertion about the importance of servant leadership, which promotes effective research leadership through valuing and

developing people in building collaborative and participatory, productive research communities.

Bryman & Lilley (2009) postulate that for research leadership to be effective, its exercise must take into account the context. This is pivotal as leadership models effective in other contexts could be ineffective in others. Therefore, McCaffery (2018) states that in taking context into account, leaders must realise that in their quest for effective leadership, they must know well the university they are leading, the environment, various divisions and themselves.

On the other hand, leading research on a daily basis requires research management. Management is defined as a process of planning, organising, leading and controlling organisational activities in order to achieve its goals. Therefore, research management will require both executive and operational processes. This, according to Yielder & Codling (2004), can be done using two management and leadership approaches in higher education. i.e. the one that prioritises academic prowess, meaning intellectual achievements and that which focuses on operational competencies. According to them, combining the two could have a complementary effect on institutional effectiveness.

The notion of research development is often associated with the ability of research institutions to build on their research funds, infrastructure and culture. Evans (2012) identifies three components of research development, i.e. behavioural development, attitudinal development and intellectual development. Evans (2012) goes further to state that research development increases people's capacity and willingness to conduct research and continuously improve their course.

However, Day (2000) posits that research development requires leadership or leader development as it incorporates and enables them to handle the process of research development. Hence, Elkins & Keller (2003) stipulate that the prerequisite for research development is transformational leadership, communicative and inspirational, visionary, agile and leadership that provides intellectual stimulation. This, according to Hansson & Monsted (2008), explains how knowledge production by institutions of higher learning has become entrepreneurial with the aim of increasing research funding and financial endowment.

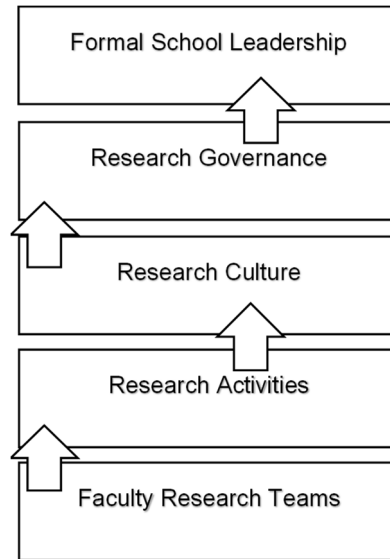## Application of Research Leadership

Higher education leadership has always been caught between two dichotomies. First, leadership by those who have seen it all, meaning those who have research accomplishments, which may be an example to others on how

it could be done (Goodall, 2009). However, according to Rayner et al. (2010), there is always tension between the role of those who are members of the professorate and carrying out administrative roles. Second, leadership by those who do not have research accomplishments but have assisted the universities in their quest for effective operations and the achievement of other goals, such as fundraising. On the other hand, there is a move away from individual leadership to distributive, participative and collaborative leadership. However, depending on the age of the institution, where policies and procedures have not been developed, it could be risky to apply distributive leadership, as most could still need guidance about the vision and institutional goals.

In the application of research leadership, there is positional leadership and non-positional leadership. According to Juntrasook et al. (2013), there are basically two discourses that define positional and non-positional leadership. Juntrasook et al. (2013) postulate that leadership may characterise the heroic approach by academics, sometimes contrasted with victimhood, depending on the dynamic relationship between those wielding heroic influence and those with positional authority. What this means is that when faculty agency is enabled to lead, they are likely to work with and through others to support research activities. However, being faced with a rigid positional leader like the head of the department or dean might lead to constrained leadership and, thus, an unsupported research environment. As such, there is a view that positional leadership and non-positional leadership have to be complementary rather than competing.

Non-Positional Research Leadership

Non-positional research leadership is premised on the assumption that research is faculty-led. The decision-making process in research-related matters assumes a grassroots rather than a top-down administrative model. Figure 1.1. Below is the direct form of non-positional leadership flow of faculty-led research:

Fig. 2-1 Grassroots Non-Positional Leadership Flow

The faculty research teams are the cornerstones of research leadership. According to Levi & Slem (1995), the higher form of teamwork results in self-managing teams. Research self-managing teams are often driven by the need to generate knowledge through their research projects. Strnadová et al. (2014) postulate that building inclusive research teams fosters the exchange of experiences, developing new research strategies through training, peer mentoring and developing new research skills. As Manning, Parker & Pogson (2006) aver, the average team behaviour directly influences the behaviour of the team members.

Faculty research activities are characterised by the establishment of a collaborative network between faculty, students and faculty across one research university and others, sometimes leading to interdisciplinary research. Johnston, Burleigh, & Wilson (2020) believe that the interdisciplinary platform for collaboration offers a credible change for faculty research development. As Stevenson et al. (2005) contend, the development of a community of learning by researchers over the possibility of research support for those still emerging.

Positional Research Management

While research leadership may be non-positional, research management rests with the authority of the formal managers. The formal structures are aimed at ensuring that decisions are taken in accordance with the attainment of the strategic goals of the institution. Figure 1.2. Below is the direct form of bureaucratic positional management flow of research management:
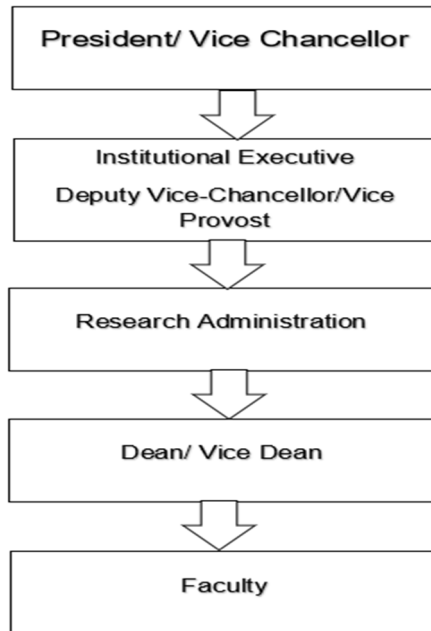

Fig. 2-2 Bureaucratic Positional Management Flow of Research Management

While faculty-led research is important for research leadership, the role of university managers in managing research has always been a point of discussion in university leadership. According to Carlsson, Kettis & Söderholm (2011), the role of university managers is to ensure that the research that is produced by faculty conforms to the standard and quality that the university is aiming for. However, according to Lou et al. (2018), the research productivity of faculty members who do administrative work were likely to be affected by their administrative responsibilities. The main question that remains is whether there is a positive correlation between the

manager's research profile and that of the faculty they lead. According to Taylor (2006: 16), the role of university managers is both strategic and operational, i.e. strategic is a sense of developing the vision, articulating the priorities and ensuring performance, quality and accountability, while ensuring effective operations through communication, research culture and organisational structures, policies and procedures. As Bystydzienski et al. (2017) aver, it is the responsibility of academic managers to create an inclusive academic culture.

Therefore, faculty-led research processes coupled with managerial activities should be aimed at research development. Figure 1.3 below shows the flow of the research development process:
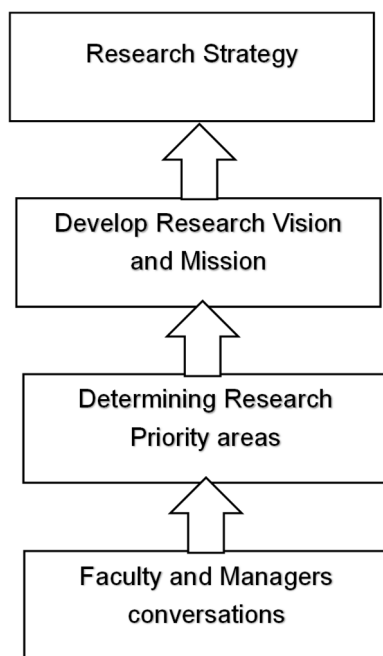
Fig. 2-3 The Flow of the Research Development Process

Reflections on the Post-Soviet Central Asian Context

Leadership in a post-Soviet Central Asian Context has been bureaucratic, meaning the decisions are centrally made and faculty in the university follow the orders from university leaders who hold formal positions of power. However, the adoption of Western principles such as the Bologna Process