

**THE INFLUENCE OF INSTRUCTIONAL
LEADERSHIP ON TEACHING COMPETENCY IN
OMAN'S UNIVERSITIES: CONTINUOUS
PROFESSIONAL DEVELOPMENT AS A
MEDIATOR**

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UNIVERSITI SAINS MALAYSIA

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by

AL ABRI AAMIR SAID SULAIYAM

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In the name of Allah, the Most Gracious, the Most Merciful.

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AL ABRI AAMIR SAID SULAIYAM

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LIST OF ABBREVIATIONS

CPD	Continuous Professional Development
HEIs	Higher Education Institutions
IL	Instructional Leadership
INSET	In-Service Education and Training
MMR	Mixed Methods Research
MoHERI	The Ministry of Higher Education, Research, and Innovation
OAAAQA	Oman Academic Accreditation Authority and Quality Assurance
OAC	Oman Accreditation Council
PCS	Partnership for 21st-Century Skills
PLC	Professional Learning Communities
SIPTT	Specialized Institute for Professional Training of Teachers
UK PSF	The United Kingdom established a Professional Standards Framework

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**PENGARUH KEPIMPINAN INSTRUKSIONAL KE ATAS KOMPETENSI
PENGAJARAN DI UNIVERSITI OMAN: PEMBANGUNAN PROFESIONAL
BERTERUSAN SEBAGAI MEDIATOR**

ABSTRAK

Kajian ini meneroka pengaruh kepimpinan instruksional terhadap kompetensi pengajaran abad Ke-21, dengan pembangunan profesional berterusan sebagai mediator dalam kalangan pengajar di Oman. Kaedah kajian campuran digunakan untuk meninjau 169 pengajar universiti melalui *Google Forms* dan menemubual pemimpin dan pengajar selepas menganalisis tinjauan tersebut. Rangka kerja penyelidikan menggabungkan Kepimpinan Instruksional sebagai pembolehubah bebas dengan menggunakan kategori dan deskriptor Hallinger dan Murphy. Pembolehubah bersandar adalah Kemahiran Abad Ke-21 untuk Kompetensi Pengajaran Abad Ke-21. Ciri-ciri Pembangunan Profesional Berterusan, seperti yang dibincangkan oleh Tichenor dan Tichenor, bertindak sebagai mediator. Data kuantitatif dianalisis menggunakan perisian IBM SPSS V. 24, mendedahkan penemuan yang signifikan. Penemuan tersebut menyokong tiga hipotesis alternatif yang dicadangkan bahawa Kepimpinan Instruksional secara signifikan membentuk Kompetensi Pengajaran Abad ke-21 dan memudahkan Pembangunan Profesional Berterusan untuk pengajar, manakala Pembangunan Profesional Berterusan mediasi pengaruh Kepimpinan Instruksional ke atas Kompetensi Pengajaran. Analisis data kualitatif mencadangkan bahawa Kepimpinan Instruksional menumpukan kepada menyokong pembangunan pengajaran dan pembelajaran untuk abad ke-21. Penemuan ini menyumbang kepada pemahaman tentang kerumitan antara Kepimpinan Instruksional, Pembangunan Profesional Berterusan, dan Kompetensi Pengajaran Abad ke-21 di Institusi Pengajian Tinggi di Oman. Kajian ini mencadangkan implikasi untuk pemimpin pendidikan,

pembuat dasar, dan institusi Pengajian Tinggi untuk meningkatkan kompetensi pengajaran dan menyesuaikan diri dengan permintaan abad ke-21 yang semakin berkembang. Dapatan kajian ini menyumbang kepada pemahaman teoritis tentang Kepimpinan Instruksional dengan menekankan kepentingan pemilihan pemimpin yang ketat, pembangunan profesional berterusan, pembuatan keputusan yang terdesentralisasi, dan persekitaran yang menyokong. Pandangan ini adalah penting untuk membangunkan strategi Kepimpinan Instruksional yang berkesan yang meningkatkan kompetensi pengajaran dalam abad ke-21. Walau bagaimanapun, penyelidikan kualitatif lanjut disarankan untuk meneroka persepsi pengajar mengenai kepimpinan instruksional dengan lebih mendalam.

**THE INFLUENCE OF INSTRUCTIONAL LEADERSHIP ON TEACHING
COMPETENCY IN OMAN'S UNIVERSITIES: CONTINUOUS
PROFESSIONAL DEVELOPMENT AS A MEDIATOR**

ABSTRACT

This study explored the influence of Instructional Leadership on 21st-Century Teaching Competency, with Continuous Professional Development as a mediator among teachers in Oman. This Explanatory Mixed-Methods Research surveyed 169 university teachers via Google Forms and interviewed leaders and teachers after analyzing the surveys. The research framework incorporates Instructional Leadership as an independent variable, utilizing Hallinger and Murphy's categories and descriptors. The dependent variable employed the Partnership for 21st-Century Skills Framework for 21st-Century Teaching Competency. As discussed by Tichenor and Tichenor Continuous Professional Development traits act as mediator. Quantitative data were analyzed using the software IBM SPSS V. 24, revealing significant findings. The quantitative findings support the three alternative hypotheses that Instructional Leadership significantly shapes 21st-Century Teaching Competency and facilitates Continuous Professional Development for teachers, while Continuous Professional Development mediates the influence of Instructional Leadership on 21st-Century Teaching Competency. Qualitative data analysis suggests that Instructional Leadership focuses on supporting the development of teaching and learning in the 21st century. These findings contribute to the understanding of the complexity of Instructional Leadership, Continuous Professional Development, and 21st-Century Teaching Competency in Omani higher education institutions. This study suggests implications for educational leaders, policymakers, and higher education institutions to enhance Teaching Competency and adapt to the evolving demands of the 21st century. The

findings of this study contribute to the theoretical understanding of Instructional Leadership in Higher Education Institutions by emphasizing the importance of rigorous leader selection, Continuous Professional Development, decentralized decision making, and a supportive professional environment. These insights are crucial for developing effective Instructional Leadership strategies to enhance teaching competencies in the 21st century. However, further qualitative investigation is recommended to explore teachers' perceptions of Instructional Leadership in depth.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The goal of higher education leadership is to improve student learning, teaching conditions, and teaching processes (Lian & Wardiah, 2020). Likewise, Ward and Mars (2020) are certain that Continuous Professional Development (CPD) allows teachers to acquire high levels of teaching competency in a dynamic environment where strategies and methodologies change over time. However, there are challenges in considering teacher identity as a crucial factor for in-service education and training (INSET), facing both educators and institutions in the 21st century.

Meanwhile, Instructional Leadership (IL) plays a role in facilitating 21st-century teaching competency via CPD by making reasonable decisions and judgments and bearing future responsibility for their decision-making (Male and Palaiologou, 2015). For example, Male and Palaiologou expect leaders to invent new strategies to allow any educational institution and leadership to think about the future of their institution in real terms, so leaders take 'what to do' besides asking 'why to do' to accept the conscious need and specific requirements for 21st -Century Teaching Competence (TC).

The primary role of any instructional leader is to possess fundamental values like being competent in 21st-century teaching competency skills such as trust, encouragement, and praise to improve and prosper (Akassri & Azaimi, 2019). These models of effective leadership were suggested by Day (2019), who stated that leaders are expected to facilitate more personal values concerning the demonstration and

raising of respect (for individuals), justice and fairness, aspiring for the well-being and inclusive improvement of both students and staff, integrity, and honesty.

In the twenty-first century, higher educational institutions were challenged to provide updated and high levels of knowledge and skills (Ersozlu & Saklan, 2016). Therefore, Wieczorek and Manard (2018) considered educational reform to improve the performance of institutions and human capital as a continuous process worldwide. Wieczorek and Manard attributed the high performance of an educational institution in the 21st century to three main factors: teaching competency, teacher professional development, and student support structures.

As Identified by Al Aafi (2014), there is a deficiency in 21st-Century TC education and training opportunities in Omani HEIs, compounded by participants' lack of motivation due to scheduling constraints. Additionally, these institutions lack clear policies or systematic plans to enhance CPD or to introduce INSET to improve contemporary teaching skills. In a related study, Al Hosni (2019) emphasizes the need for leadership within Omani HEIs to develop more modernized INSET opportunities to enhance teacher collaboration and teaching competency. Al Hosni further recommends conducting pre- and post-training surveys for both academic and non-teaching staff to better address the evolving CPD requirements in HEIs.

Al Hosni (2019) points out a significant gap in tailoring CPD programs to the current needs and demands of HEI faculty members, considering their subject areas, teaching methodologies, and career aspirations. Addressing a such gap can help HEIs support educators' professional identities and enhance their engagement with INSET, as the evolving role of teachers is influenced by surrounding values, professional interactions, and student relationships (Al Bahri,

1.2 Background of The Study

1.2.1 Higher Education Institutions in Oman

The considerable expansion of Higher Education Institutions (HEIs) in the Sultanate of Oman began when the Ministry of Higher Education, Research, and Innovation (MoHERI) was established by a Royal Decree (No.15/94). Initially, the Ministry observed six public HEIs across the sultanate. The Ministry then started some private HEIs, and the first private two-year college was established in 1995 with academic affiliation with different international HEIs (Al Shabibi & Silvennoinen, 2018).

According to the formal website of the Ministry of Higher Education, Research, and Innovation (MoHERI, 2021), private HEIs started to increase and were thus formalized and regulated by other Royal Decrees (including 41/1999, 42/1999, and 67/2000). Therefore, the number of both public and private HEIs in Oman has increased progressively since the establishment of the first HEI in 1986 reaching a total of sixty-two HEIs in 2018 (Al'Abri, 2019). The sixty-two institutions are classified into universities, colleges, and institutes, of which 28 are private universities and colleges, and the rest are public governmental institutions.

MoHERI is responsible for making the policies and financial matters of most Omani HEIs, supervising performance, ensuring the application of quality assurance, and accomplishing their visions and goals (Al Hosni, 2019). However, there were some concerns about the role of HEI leadership in utilizing and focusing on CPD to cope with the 21st-Century TC in Oman. Therefore, at the beginning of the 21st century, the national government realized the need to establish an independent unit to monitor the Quality Assurance System in Higher Education (Al Hosni, 2019). The management of

Oman's higher education institutions is complicated and supervised by various branches of the Omani government (Al-Lamki, 2006). A big issue HEIs face is the diversity of governing bodies like the Ministry of Labor, Ministry of Higher Education, Ministry of Health, and many other private HEIs that may result in different policies towards teaching competence (Al Hosni, 2019).

To provide a clearer context of teaching and teachers within the HEIs in Oman, the English language is used as a medium of teaching in most specializations and degrees, except for some social science and religious programs taught in Arabic, the native language of the Omani people (Al'Abri, 2019). Al'Abri has also stressed that the English Language is not only the medium in HEIs but also the first language used by all professionals in hospitals, oil field companies, businesses, private schools, firms, and other specialized organizations in Oman. Although there are many local Omani teachers in Omani HEIs, most teachers are expatriates from different nationalities, such as native English countries, India, the Philippines, and some other countries. The current essential requirement to be a faculty member in HEIs is a master's degree in the same field as a bachelor's degree.

Meanwhile, some teachers have PhDs, but few Omani experienced faculty members only have a bachelor's degree and mainly handle administrative duties. Teacher recruitment in HEIs occurs either through the Omani Ministry of Labor or via direct annual contracts with the institution. The eligible candidates undergo interviews and run a demo class to be employed with a degree matching their qualifications and experiences. Depending on the vacancies available, the selected staff receives conditional/unconditional offers to join, provided that the degree aligns with the requirements of MoHERI (Al'Abri, 2019). Once faculty members sign the employment contract, they are expected to be briefed about the institutional bylaws,

including the mission and vision, to acquaint themselves with the academic regulations and bylaws as regulated by the MoHERI (Al-Busaidi et al., 2018).

In the Omani educational HEIs, the primary responsibility is assigned by the Quality Assurance in MOHERI and Oman Authority for Academic Accreditation and Quality Assurance (OAAAQA) to manage educational institutions, where top leaders are considered to cope with national commands and requirements (Eltayeb & Abdel-Gadir, 2020). Consequently, Eltayeb and Abdel-Gadir expect leaders in each department to become the main agents responsible for executing the directives handed down by the authorities. OAAAQA supports Instructional Leaders (ILs), who mainly focus on implementing teacher performance evaluations to provide substantiated evidence to enhance institutional leadership effectiveness (Al Shabibi & Silvennoinen, 2018). Recognizing the need to keep pace with the evolving international and instructional landscape of the 21st century through inclusive reforms, the Omani Ministry of Education acknowledges that institutional leaders must acquire contemporary leadership skills (Al-Busaidi et al., 2018).

Al Shabibi and Silvennoinen (2018) believe that the selection process for professional leaders is critical to ensure the efficient execution of administrative responsibilities. However, the criteria for appointing and preparing administrative leaders are not well defined in the HEIs Policy Architecture (Al'Abri, 2019). The only requirement, as stated in the formal website of OAAAQA (2023), is that all instructional leaders possess prior teaching experience in their respective fields. Sometimes, candidates with practical experience, such as attending seminars or conducting scientific research, have the privilege of leading their departments. Another essential criterion relates to the leader's prior engagement and disciplinary conduct within the community and workplace (OAAAQA, 2023).

1.2.2 Instructional Leadership (IL)

Hallinger et al. (2018) traced the evolution of Instructional Leadership (IL) since the middle of the 20th century when there was a "Practice-Based Prescription" movement to improve education in the USA. Subsequently, some studies and extensive research have been conducted to investigate why some institutions could improve, while others could not. Most of these findings are attributed to the performance of principal leadership. Outside this movement, the IL Model appeared in the early 1980s as the emergence of American policymakers to improve education. However, Hallinger and Murphy (1985) developed an inclusive model for IL containing three dimensions: school mission, instructional program management, and promoting a positive learning atmosphere.

Hallinger and Murphy (1985) classified the definition of IL into "narrow" and "broad" terms where the narrow term is limited to the administrative actions related to learning and teaching-observable behaviors such as classroom observation, the broad term involves all leadership actions that influence student learning to improve teaching and student learning. Thus, IL focuses not only on administrative leadership, but also on students, teaching faculty, and learning-teaching procedures. Hallinger and Murphy explained that developing the learning climate can be achieved through five key elements and influential practices. One is creating and promoting professional development that can take place inside or outside the educational institution in formal and informal settings.

From this perspective, Martin (2018) believes that IL encourages educational distinction and fairness, involves anticipation and advocacy, and maintains commitment to the institutional mission. In addition, the main aim of IL is to acquire

and share educational supplies; share and transmit development; and help teachers with agendas, skills, and actions applied to achieve the target vision. Martin insists that instructional leaders should have various responsibilities, including relationships among teachers themselves and between teachers and students in the institution. Leaders of IL also create harmony and democracy by supporting interpersonal communication to exchange valuable information. Hence, in this research, IL is the independent variable, which is the preceding factor that likely influence 21st-Century Teaching Competency, which is the dependent variable. Rogers and Revesz (2020) regarded IV as an experimental factor, as this research explains the influence of IL on teaching and learning.

Any organization's teaching competency and success depend highly on leadership (Sahertian & Jawas, 2021). According to Maponya (2020), once a leader of an educational institution can achieve its objectives and goals professionally, this can directly influence the success of the organization or even the entire nation. Sahertian and Jawas (2021) urged organizational leadership to build a positively desired workplace culture to improve overall performance and meet set goals and objectives. In turn, this can be a factor in overall well-being, leading to increased employee satisfaction, retention, and eventual recognition (Bimpong et al., 2020). Effective leadership is expected to focus on different contexts while improving individual employees, teams, and organizational outcomes as a whole (Hou et al., 2019). However, this research mainly investigates instructional leadership and explores teaching competencies like attitudes, knowledge, and behavior, as influential leaders are fundamental for examining successful leaders who lead academic institutions towards the desired results (Yurii et al., 2018).

According to the official website of the Omani Ministry of Higher Education, Research, and Innovation (2021), Oman has undertaken extensive reforms in its higher education sector to align itself with global standards and respond to local needs. The Omani government's Vision 2040 underscores the importance of education to drive economic diversification and development. Thus, Oman has undertaken extensive reforms in its higher education sector to align with global standards and respond to local needs. Leaders in Omani higher institutions face several challenges, including the need to balance traditional values with modern educational practices, limited financial resources, and the need to enhance research capabilities (Al Kalbani, 2017). Also, Al-Kiyumi and Hammad (2019). However, there are numerous challenges globally, with unique contextual, administrative and professional factors influencing HEIs in Oman (Al-Lamki, 2006).

1.2.3 The 21st-Century Teaching Competency (TC)

There have been many initiatives in the 21st century to reform education among many international organizations, ministries of education, HEIs, and schools to modify education priorities and meet new learning outcomes by suggesting many 'soft skills' considered essential in the 21st-century teaching competency (Thornhill-Miller et al., 2023). For example, Kaufman (2013:79) explained that the 21st-Century TC includes "competencies such as critical thinking and problem-solving skills, communicative skills, information and media literacy skills, contextual learning skills, and an ever-important collaboration skill set". Similarly, Fullan and Pinchot (2018) followed 'deep learning' which goes beyond acquiring knowledge by emphasizing the following essential skills to face global challenges in the coming years. The 21st-Century TC skills include Creativity and Imagination, Critical Thinking and Problem-Solving,

Collaboration, Communication, Character Education, and Citizenship. However, Motallebzadeh et al. (2018) believe that 21st-Century TC, including critical thinking, problem solving, and decision-making skills, tends to be missing within some HEIs.

The 21st-Century TC skills have been explained by Bekteshi (2017) as follows. According to Bloom's revised taxonomy and the 4th Industrial Revolution, creativity has the highest level of cognitive learning. Critical thinking is the second pillar of 21st-Century TC, including the development of social media and hypothesis testing and urging learners to look at problems differently and link learning across subjects. Students, therefore, are expected to have skills in reasoning, analyzing, evaluating, problem-solving, and making judgments and decisions (Kaufman, 2013). Another element is collaboration, in which teachers are required to teach in teams to reconcile tension and dilemmas, improve productivity, and exercise flexibility and openness with certain compromises.

According to Thornhill-Miller et al. (2023), to cope with the 21st century, teachers in HEIs need to empower communication so that students know how they best share their ideas, thoughts, and solutions by all means and how to persuade students. 'Character' expects teachers to improve a solid personal attitude of persistence, resilience, and eagerness to trial. 'Citizenship' is also equally crucial for the future of our societies to deal with social responsibilities and needs to be expanded with global citizenship. However, barriers to practicing the theory of 'Deep Learning' are expected, including the adoption of new policies and pedagogies (Kaufman, 2013).

Similarly, the 21st-Century vision for HEIs, which is formed by C21 Canada (Boyko-Head, 2021), expects staff in any educational field, including policy makers, principals, teachers, parents, and stakeholders, to 'call for change.' Teachers must

"promote and attend in-service training opportunities on 21st-century learning models, methodologies, and digital resources and tools" (Boyko-Head, 2021:13). Thus, all these skills of 21st-Century TC previously mentioned are crucial for teachers to keep up with global educational trends and confront challenges among worldwide changes. To keep up with the 21st century and localize the issue, it is vital to maintain and improve teaching competency, ensuring that educators remain abreast of the latest pedagogical advancements and technological innovations (Kennedy, 2016).

Higher education in Oman has undergone a significant transformation over the past few decades, driven by a national agenda to improve educational standards and outcomes, as explained by the Omani Ministry of Higher Education, Research, and Innovation (2021). These programs often focus on areas such as curriculum design, assessment strategies, and the integration of technology in teaching but rarely incorporate soft skills such as communication, creativity, and collaboration. Generally, despite the recognized importance of instructional leadership in improving teaching competency, several challenges exist in the Omani context. These include limited resources, resistance to change among faculty members, and the need for more comprehensive training programs for instructional leaders.

Having touched upon the factor of 21st-Century TC briefly, this factor is the dependent variable of the study. Therefore, the outcome variable of this study investigates teachers' aptitude as a response to instructional leadership to keep pace with 21st-Century Teaching Competency. Rogers and Revesz (2020) believe that 21st-Century TC is the consequent variable (here called the dependent variable) that is directly affected by leadership (which is the Independent Variable in this research).

1.2.4 Continuous Professional Development (CPD)

Despite the intensive study of pre-service education, Continuous Professional Development (CPD) is vital for improving student success and achievement, and it is crucial for educational institutions and decision-makers to 'make substantial changes' for the sake of 'Getting from Here to There' (Gore et al., 2021). This means that CPD can make changes that take place in various professions and differ accordingly (Tyagi & Misra, 2021). Tyagi and Misra consider CPD to be an approach in some professions and can be a mode of education and/or learning in others, and sometimes it may be an activity in itself. In addition, in some professions, the CDP is considered a staff responsibility, while it can be a measurement factor in other institutions (Tyagi & Misra, 2021).

Day (2019) describes CPD as consistent educational involvement, including curricular activities that improve personal and institutional performance in teaching. Therefore, Day expects teachers to innovate in their involvement as 'change agents.' On the other hand, De Farias and De Araujo (2018) describe CPD as a prolonged activity that involves frequent occasions and practices planned thoroughly to improve progress and advancement in a specific profession. Therefore, Day's definition is more inclusive, as it includes both intended and unintended learning, and CPD not only benefits individuals, but also the entire academic institution (De Farias & De Araujo, 2018).

Various studies have explained the importance of CPD for teachers, but researchers tend to disregard the influence of Instructional Leaders and teacher CPD (Hallinger and Walker 2017). A study by Kim and Lee (2019) in the context of Japan, Singapore, and South Korea found significant evidence of whether IL has a role in

shaping teachers' CDP. To keep up with the 21st-century TC, ILs are expected to collaborate with teachers and expand their knowledge and learning opportunities to disseminate any acquired skills (Kim et al., 2019).

The mediating variable of this research includes formal and intended CPD, such as conferences, workshops, and courses, usually referred to as in-service education and training (INSET), regardless of the inevitable differences between INSET and CPD. While INSET entails institutional requirements and demands, CPD can be broader and reflect the driving interest of staff (Onalan & Gürsoy, 2020). Thus, CPD is usually top-down by decision-makers in academic institutions, in line with policy requirements and imperatives (McMillan et al. 2016). Overall, CPD is the mediator variable in this research, as it identifies and explains the relationship between institutional leadership and coping with 21st-century TC.

Instructional leadership involves guiding and managing educational programs to improve teaching and learning outcomes (Hallinger, 2011). According to Al-Busaidi et al. (2018), instructional leaders in the Omani context are expected to foster an environment that encourages academic excellence and professional growth among faculty members. Oman's higher education sector has embraced CPD as a means of elevating teaching standards through the implementation of structured CPD programs to support faculty development (Al-Lamki, 2006). However, the absence of a well-structured and comprehensive CPD framework is another significant barrier in Omani higher education as many institutions do not have clear policies or guidelines for CPD, leading to ad-hoc and inconsistent professional development efforts (Al-Lamki, 2006).

Some teachers develop professionalism as a value and motivation for job security, retention, and content relevance (See et al., 2020). Similarly, Perryman and

Calvert (2020) assume that the need for curriculum development, emphasis on collaboration, and communities of practice can motivate teachers to join CPD and thus encourage teaching. Meanwhile, Kruger and Pienaar (2020) found some barriers to CPD, such as impoverished CPD networks and staff lacking the time needed within their busy careers. Other constraints include a lack of senior management support, deficit models, and sense of identity (Lie et al., 2018).

Although some teachers in Oman are eager to join professional development programs and are willing to undertake learning activities for CPD purposes, others face administrative challenges and field efforts to apply what has been acquired (Al-Jabri et al., 2018). For example, some staff join CPD as a job requirement, and others join to update their subject knowledge to improve their teaching skills (Kruger and Pienaar, 2020). The Higher Education Academy (HEA) in the United Kingdom established a Professional Standards Framework (UKPSF) for teaching and enhancing learning in higher education (HEA, 2019).

The three guideline descriptors of the UKPSF illustrate the duties and professional stages of both higher education learners and teachers. While the first guideline is targeted at novice teachers in the HEA sectors, the second guideline is meant for knowledgeable teachers, and the third is for more experienced staff who usually have leadership and mentoring responsibilities. Each guideline has three elements: professional activities, core knowledge, and professional values. The UKPSF was adopted by several HEIs to guide teaching, assist their annual reviews, and enhance their professional development programs (HEA, 2019).

Therefore, Darling Hammond et al. (2017) expect ILs to be willing to enhance teaching quality to improve teacher effectiveness by properly including CPD in formal

and informal ways with encouragement, appreciation, and reward. Therefore, City University London adapted the UK PSF and proposed the following CPD cycle. The University believes that any CPD course should begin by assessing the current skills to identify learning needs. This helps define the expected learning outcomes and learning activities. Therefore, trained staff members are expected to be ready to apply what they have learned and acquired in their work practice. Finally, decision-makers assess the impact of CPD and identify further needs accordingly.

Similarly, Calleja (2018) suggested the following four CPD stages. The first stage should provide teachers with awareness of the importance of CPD. Teachers must then realize the significance of the targeted CPD program to be involved in. Once joined, teachers must actively engage in demonstration of their practice. Finally, it is time to integrate what has been acquired through professional practice.

1.3 Problem Statement

Although instructional leadership is a concept primarily associated with school education, its influence and importance can be extended to higher education not only on administrative and managerial tasks but also with a strong focus on improving teaching and learning. (Ersozlu & Saklan, 2016). IL in HEIs encompass leadership practices and strategies that shape students' educational experiences and the CPD of educators, where instructional leaders, such as Deans, Head of Departments, and faculty, play a vital role in guiding all teachers and enhancing TC. Despite significant investments in higher education and the introduction of various reforms aimed at enhancing the quality of education, there remain persistent challenges in optimizing teaching effectiveness and ensuring high guidelines of instructional quality.

This problem statement explores the need for effective instructional leadership to address these challenges and improve teaching competencies in Omani higher education institutions. The government's vision emphasizes the importance of developing a highly skilled educational system to support economic diversification and technological advancement (Al Ghatrifi, 2016). However, the quality of teaching remains uneven across institutions, impacting student learning outcomes and overall educational effectiveness (Al-Jardani, 2012). The Omani HEIs are regulated by different authorities and ministries, such as the Ministry of Health, Ministry of Higher Education, Ministry of Religion, and Ministry of Labor, so there used to be no clearly unified authority or practices among the Omani HEIs (Nasser, 2019).

Al-Sawai (2017) described the leadership in Omani HEIs as 'traditional' and thus reflected in the weak practices of the organizational system and lack of improvement plans that ought to lead to better institutional performance and improvement. The need for effective TC to prepare students for the challenges of the 21st-century has become increasingly apparent (Al Hosni, 2019). Al Kalbani (2017) concluded that IL within HEIs is a pivotal factor that influences the quality of TC, so it is imperative to investigate how IL serves as an IV in this research in shaping the 21st-century TC of educators in HEIs as the DV. Furthermore, this research aims to explore the potential mediating role of CPD in this relationship to delve into the complex dynamics of the above three variables and their implications for enhancing teaching in HEIs.

Addressing the problem of inconsistent teaching quality in Omani higher education requires a focused examination of how instructional leadership can be effectively utilized to enhance teaching competency. This research would provide valuable insights into how instructional leadership can be leveraged to achieve

educational excellence in Oman. In the 21st century, HEIs in Oman face many challenges stemming from rapid technological advancements, globalization, and a shifting economic landscape (Al'Abri, 2019). Al'Abri recommends HEIs to provide students with the skills and knowledge needed to succeed in this dynamic environment. Thus, Institutional leaders play pivotal roles in facilitating 21st-century skills, namely Critical Thinking and Problem Solving, Communication, Collaboration, and Creativity and Innovation (Van Laar et al., 2017).

CPD serves as an essential mechanism for faculty in HEIs to acquire new knowledge, refine their skills, and adapt to the evolving demands of the educational system. This study considers CPD a potential mediator necessary in a fast-changing educational landscape where Oman educators must constantly update their skills and knowledge (Al Hosni, 2019). It is assumed that IL may influence educators' engagement in CPD activities, which, in turn, may impact their TC. However, Al Ghatrifi (2016:83) concludes that CPD in the Omani HEIs context is minimal and marginal, and "CPD appeared to be offered on an ad hoc basis".

There are several types of CPD which are affected by different contextual factors. For example, individual teachers' or institutions' opportunities to participate in CPD are, thus, influenced by the teachers' and leaders' perception of knowledge, their ability to cope with learning, and educational context (Moon, 2004). Although there is a specialized center for CPD in Oman called the "Specialist Institute for Professional Training of Teachers," it is exclusive for schoolteachers, but not HEIs. This center provides necessary training and CPD for both novice and experienced teachers. Once nominated as a trainee, teachers have no right to reject but only defer for one semester as the only choice. The trainees are released from work for one week and then given an intensive course with accommodation to facilitate the CPD process (Al Shabibi &

Silvennoinen, 2018). However, there is no such systematic platform for tertiary education- HEIs; therefore, leaders and teachers in HEIs are rarely involved in any (necessary or mandatory) CPD program (Al Hosni, 2019).

Thus, there is a gap in customizing 21st -Century TC to address the current needs and demands of faculty members in HEIs, taking into consideration their specific subject areas, teaching methodologies, and career aspirations. By addressing this gap, HEIs can effectively engage with the professional identities of educators and influence their perceptions of and participation in CPD. This approach is crucial as the evolving roles of educators are shaped by surrounding values, professional interactions, and student relationships (Sadek, 2020). On the other hand, IL encourages educators to engage in effective CPD, which may indirectly enhance TC, benefiting both faculty and the university (Ersozlu & Saklan, 2016). The relationship between IL and TC in HEIs warrants extensive research. Investigating the mediating role of CPD can provide valuable insights into how Omani HEIs can leverage IL to improve teaching quality. Although some studies have examined the influence of IL on teaching practices, there is a notable gap in research that specifically addresses 21st-century TC as the dependent variable. To evaluate the efficacy of IL, it is essential to investigate leadership performance at various levels within educational institutions (Van Laar et al., 2017). This study aims to fill this gap by exploring the direct impact of IL on the development of 21st-century TC in HEIs, emphasizing the attitudes of teachers and decision makers towards CPD as a mediating factor.

1.4 Research Objectives

Having decided to investigate the IV, IL in HEIs, this research aims to investigate institutional leadership commitment to provide 21st-Century TC by

providing and facilitating CPD opportunities for staff. To investigate this issue, this research aims to:

1. Identify the level of Instructional Leadership, Continuous Professional Development, and 21st- Century Teaching Competency in Omani HEIs.
2. Examine the influence of Instructional Leadership on 21st-Century Teaching Competency in Omani HEIs.
3. Examine the influence of Instructional Leadership on Continuous Professional Development in Omani HEIs.
4. Examine the influence of Continuous Professional Development as a mediator between Instructional Leadership and 21st-Century Teaching Competency.
5. Triangulate quantitative findings from objectives 2, 3, and 4 with qualitative insights to explain how Instructional Leadership and Continuous Professional Development accustom 21st-Century Teaching Competency at HEIs.

1.5 Research Questions

The research question guiding this study is: What is the influence of IL and CPD on 21st-Century TC among teachers in Omani HEIs? This central question can be divided into the following subquestions:

1. What is the level of current Instructional Leadership practices in 21st- century teaching competency in Omani Higher Education Institutions (HEIs)?
2. Does Instructional Leadership have any influence on 21st-Century Teaching Competency in Omani HEIs?

3. Does Instructional Leadership have any influence on Continuous Professional Development in HEIs?
4. Does Continuous Professional Development play a mediating role between Instructional Leadership and 21st-Century Teaching Competency?
5. How does Instructional Leadership influence teachers at the university in 21st-Century Teaching Competency, considering the triangulation of quantitative findings from Objectives 2, 3, and 4 with qualitative insights?

1.6 Research Hypotheses

Carrying out this research, the following hypotheses are expected regarding the research questions.

- H1:** There is a significant influence of HEIs Instructional Leadership in shaping the mode of 21st-century Teaching Competency.
- H2:** There is a significant influence of HEIs Instructional Leadership in facilitating Continuous Professional Development.
- H3:** There is a significant influence of HEIs' Continuous Professional Development on 21st-Century Teaching Competency.
- H4:** Continuous Professional Development plays a significant mediating role in the relationship between Instructional Leadership and 21st-Century Teaching Competency.

1.7 Significance of the Study

This research aims to explain the influence of IL on providing and facilitating CPD to cope with the demands of 21st-Century TC among Omani HEI teachers. The Center for Educational Leadership at the University of Washington (2015) explained some of the following dimensions of the Instructional Leadership Framework that describe a set of teaching behaviors and education. Some of these dimensions involve managing people and processes by recruiting, retaining, induction, and developing staff. Thus, IL in Omani HEIs are expected to plan, implement, communicate, and monitor the institution's mission and vision by creating the required time and space for collaboration and planning.

This study contributes to current theoretical knowledge by providing a more in-depth examination of the impact of instructional leadership styles on education, particularly in HEIs. It also contributes to the body of knowledge by evaluating the relative impact of instructional leadership on CPD and teaching competencies. Previous research has shown that instructional leadership styles affect the teaching environment (Black, 2010) and professional development (Shaw & Newton, 2014). Nonetheless, there is no link between instructional leadership style and teachers' intention to improve in Omani HEIs. The results of this study would also add to the research on teaching competency by providing an overview of instructional leadership practices that encourage teachers' engagement with their organization and their willingness to be involved in CPD as a means of improving their teaching to cope with the 21st century.

The significance of this study would enhance the existing theoretical framework by offering a comprehensive analysis of the effects of instructional

leadership styles within HEIs. This study contributes to academic discourse by assessing how different instructional leadership approaches influence teaching competency through CPD among faculty members. This improves leaders' realization of their roles and issues, acts accordingly, and deals creatively with problems while following the overall objectives. Prior research has indicated that instructional leadership styles affect the teaching environment (Sokel, 2019) and professional development (Slåtten et al., 2021). However, a connection between instructional leadership styles and classroom teaching competency in Omani HEIs has not yet been established.

The findings of this study would further enrich research on teaching competency by outlining instructional leadership practices that foster faculty engagement with their institutions and commitment to CPD. The influence of IL on 21st-Century Teaching Competency in Omani HEIs is investigated in this study as there is a growing global interest in studying leadership in higher education fields driven by two main factors (Hassan et al., 2018). First, leaders in HEIs are keen to keep up with the global challenges and changes in this sector, as required by the OAAAQA. Second, HEIs are devoted to developing learners who are expected to become future societal leaders.

Thus, instructional leaders in Omani HEIs are encouraged to utilize the significance of this study to play vital roles -that can even be demanding and contradictory approaches- in executing various tasks successfully (Swanwick, 2019). For example, IL plays a developer role in supporting and coaching teachers in teaching programs while supervising and evaluating classroom instructions, so leaders perform various tasks to enhance teaching competency (Hallinger, 2011). Thus, these findings can inform the development of educational policies and strategies that prioritize

teaching competency by expanding the quality of HEIs in Oman. This research can also serve as a foundation for future studies in the field of educational leadership, particularly instructional leadership, and provide insights into best practices and areas for further exploration.

This study also aims to discover the current policy and practice of CPD on 21st-Century TC in Omani HEIs. This would be investigated by measuring the leaders' and teachers' perceptions and aspirations of CPD to cope with 21st-Century TC as the faculty are surveyed, and some are interviewed to determine how the respondents vary in participating in CPD. Thus, the study results are expected to shed light on the central issues in the facilities and/or challenges of IL in Omani HEIs, including the role of CPD drawn from the findings of this valuable research. Policy makers and leaders can also make potential recommendations as inputs for their future choices to improve HIEs in Oman.

The third significance of this study is the Enhancement of Educational Quality in Omani HEIs. Understanding how instructional leadership impacts CPD can help to develop more effective professional development programs. This, in turn, can enhance the quality of education in Omani HEIs by ensuring that teachers are equipped with the necessary skills and knowledge to meet the demands of 21st-century TC. Finally, the research can contribute to improving the competence of teachers, making them better prepared to adapt to the rapidly evolving educational landscape, and effectively fostering 21st-century TC skills.

1.8 Research Limitations

The independent variable of this research is IL, which has been extensively studied in school-level education but relatively less in the higher education field (Lie

et al., 2018). So, the first challenge is that the literature about the international and national context of instructional leadership in HEIs is minimal. There are few detailed studies or critical evaluations of this specific situation, so this shortage highlights the importance of conducting more research to better understand the difficulties and limitations of studying education in Oman. However, the Model of Hallinger and Murphy (1985) is adopted, as it is the best model that matches Omani HEI practices, and very few studies are available in such fields.

Second, some HEIs practice rotation in leadership positions, including HoSs, HoDs, and Dean Assistants. Leaders are initially reluctant to participate in collecting qualitative data, as they may have different practices and attitudes. Although participation in the research is voluntary, such a challenge could affect the depth and breadth of the data collection and analysis, potentially leading to incomplete or biased qualitative results for the final research question. The intended participants of this study are faculty from one Omani HEI, so this study is context-specific, and findings from this study may not be readily generalizable to other educational settings or countries due to the different characteristics of the Omani educational system.

Although the confidentiality of the study participants is guaranteed, the study may be influenced by external factors, such as institutional or personal constraints, which could impact the educational landscape and possibly confound the results. Another limitation is regarding the quantitative data that are not collected from the students' side, but only from leaders and teachers who tend to be restricted to their individual practices. Identifying standardized practices is challenging, as these practices must reflect the attitudes, operational plans, and obstacles they encounter in facilitating CPD.

1.9 Operational Definitions

1.9.1 Instructional Leadership (IL)

The independent variable in this research is Instructional Leadership in the Omani HEIs, which can set the institutional mission, execute their instructional programs, and encourage an inclusive teaching atmosphere (Hallinger & Murphy, 1985). ILs are expected to set up academic aims and objectives that are delivered to staff, monitor teachers' performance along with students' learning, and facilitate and encourage confidence and dedication in teaching and learning while assisting teachers' CPD (Hallinger, 2018).

IL in the Omani HEIs context can be operationally defined as the proactive and effective leadership practices and strategies employed by academic administrators and leaders within these institutions to foster a culture of continuous improvement in teaching competency. The Model of IL was initially developed in the 1980s by Hallinger & Murphy (1985) to form successful teaching and learning practices and reshape social notions and structure (Hallinger & Murphy, 1985). Therefore, the Instructional Leadership model includes three dimensions in this research: defining the institutional mission, managing the instructional program, and promoting a positive learning climate.

A- Defining the Institutional Mission

i. Frames the Institutional Goals

It was confirmed that defining the school's goals falls under the purview of principals as instructional leaders to support teachers in planning and accomplishing institutional aims and objectives (Hallinger & Murphy, 1985). An instructional leader's