

## Vietnamese University Staffs' Perceptions of Lecturer Professional Development During the CDIO-Based Curriculum Implementation

Ngoc Hai Tran<sup>1</sup>, Vinh Anh Le<sup>2</sup>, Hung Tien Nguyen<sup>3</sup>, Phong Cong Tran<sup>4</sup>,  
Nhan Van Phan<sup>5</sup> and Hong-Tham Thi Dinh<sup>6,\*</sup>

<sup>1</sup>*Department of HR and Administration, Ha Tinh University, No 447, 26 March St., Ha Tinh city, Vietnam, The Vietnam National Institute of Educational Sciences, No 101, Tran Hung Dao St., Ha Noi, Vietnam*

<sup>2, 4, 5</sup>*The Vietnam National Institute of Educational Sciences, No 101, Tran Hung Dao St., Ha Noi, Vietnam*

<sup>3</sup>*Department of Management for Sciences, Training and International Cooperation, The Vietnam National Institute of Educational Sciences, No 101, Tran Hung Dao St., Ha Noi, Vietnam*

<sup>6</sup>*Department of Quality Assurance, Thu Dau Mot University, No 06, Tran Van On St, Thu Dau Mot city, Binh Dương province, Vietnam*

<sup>1</sup>*ORCID ID: <https://orcid.org/0000-0003-3326-1365>, E-mail: <sup>1</sup><haingoc74@gmail.com, or ngoc.tranhai@htu.edu.vn>, <sup>2</sup><leanhvinh@gmail.com>, <sup>3</sup><hunga60@gmail.com>, <sup>4</sup><tcphong@moet.edu.vn>, <sup>5</sup><thucnghiem106@yahoo.com>, <sup>6,\*</sup><thamdth@tdmu.edu.vn> or <dinhtihongtham.tdmu@gmail.com >*

<sup>6,\*</sup><thamdth@tdmu.edu.vn> or <dinhtihongtham.tdmu@gmail.com >

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**ABSTRACT** Lecturer professional development (LPD) plays an important part in promoting student achievement and education quality improvement. At Ha Tinh University (HTU), Vietnam, the CDIO - based curriculum has been implemented since 2016 in different study programs. In order to make it succeed, LPD is considered a key measure. This qualitative case-study research aims to investigate the perceptions of HTU managers and the lecturers on LPD related to the CDIO based curriculum implementation using the data from the interviews, questionnaires and the documents. Significance of LPD related closely to the CDIO-based curriculum implementation is highly appreciated by HTU managers and lecturers.

### INTRODUCTION

Lecturer professional development has been believed to play a vital role in the education quality improvements in higher education institutions. In the last decades, four trends on lecturer professional development in the global literature have been emerged. First, the lecturer professional development significance (referred as LPD) has been recognised to be as vital as pre-service lecturer education at higher education institutions in terms of its important impacts on the teaching quality (Hallinger et al. 2017; Lieberman and Pointer Mace 2008; Sparks 2012). Second, a traditional perspective of LPD, including in-service training courses and degree upgrad-

ing programs, has been replaced by more school-based professional learning strategies (Harris and Jones 2019; Opfer and Pedder 2011; Webster-Wright 2009). Furthermore, LPD is being conducted more in schools as professional learning communities (Little 2012). Finally, LPD has played a central role in sustainable educational development strategies (Darling-Hammond and McLaughlin 2016; Hallinger et al. 2021; Qian and Walker 2016; Tran et al. 2018; Tran et al. 2020).

The present study was carried out in Ha Tinh University in Central Vietnam where the new CDIO-based initiative (Conceiving-Designing-Implementing-Operating model) curriculum changes and application have been implemented since 2016 to satisfy the increasing requirements of employers and the job market for more improved graduate quality. The quality of lec-

<sup>6,\*</sup>*Address for correspondence:*

*E-mail: <thamdth@tdmu.edu.vn, or dinhtihongtham.tdmu@gmail.com>*

turers plays a significant role in the successful implementation of the CDIO-based curriculum at Ha Tinh University in which professional learning of lecturers related to academic and professional aspects related closely to CDIO-based curriculum implementation in general, and business administration in particular, is important. As a result, the positive perceptions of Ha Tinh University's staff towards the significance of LPD can enhance the improved quality training at HTU. Thus, the research question is, "How do Ha Tinh University managers and lecturers perceive the significance of lecturer professional development in response to the new CDIO-based curriculum implementation to achieve improvements in quality?"

The qualitative case-study research design was employed in this current research whereby the perceptions of a number of HTU managers and lecturers on the importance of lecturer professional development during the time of the new CDIO-based initiative curriculum implementation were analysed. Their perceptions and beliefs were directly recorded, their practices were observed, and related policy documents were examined to triangulate the data sources. The investigation sought mainly to provide more insights to inform university staffs' perceptions and beliefs and practices more widely in Vietnamese higher education institutions. The research also offered a good chance to reflect critically the international literature about the important roles of lecturer professional development.

### Literature Review

To provide an overall understanding of lecturer professional development to readers and researchers, three issues will be examined in this section. First, a number of definitions of lecturer professional development are examined and links are made to the Vietnamese educational context. Next, the significance and purpose of lecturer professional development are described. Characteristics of effective professional development are explored in the third issue.

#### *Definition of Teacher Professional Development*

The literature provides various definitions of teacher professional development. According to the Educational Resources Information

Center (ERIC) database, teacher professional development refers to "activities to enhance professional career growth" (cited in Lodiagia 2002: 24). More specifically, teacher professional development includes those processes and activities which are designed to improve or enhance the job-related academic knowledge, professional skills or characters of teachers so that they can help to develop suitable learning programmes to improve student learning and achievements (Clement and Vandenberghe 2011; Darling-Hammond and McLaughlin 2016; Guskey 2010; Qian et al. 2017). Those strategies or processes consist of individual development, continuing education, and in-service education, as well as curriculum development, conferences, workshops, colleague collaboration, learning groups, and peer coaching or mentoring (Alberta Teachers' Association (ATA) 2006; Darling-Hammond and McLaughlin 2016; Newmann et al. 2013; Vescio 2008; Wang 2016). Fullan (2011) expands the definition to include "the sum total of formal and informal learning experiences throughout one's career from pre-service teacher education to retirement" (p. 326). According to Oliva and Pawlas (2003), teacher professional development is a programme of activities developed and implemented to enhance the teachers' personal and professional improvements. In a similar vein, in the opinion of Lodiagia (2002), teacher professional development is "...the process of increasing or extending the capacity of staff, for performance of various duties. It could involve enrichment of an officer's capacity for performance in the current post but it could also mean preparing an officer for another assignment into which he/she will be deployed after preparation" (p. 48). From the literature, it can be deduced that the broad meaning of staff professional development encompasses "a range of activities from individual teacher reading, to exploring a website, individual or group attendance at a conference, action research in the classroom, the curriculum implementation process particularly with groups, therefore generally including individual, as well as collaborative projects" (ATA 2006: 46).

Nevertheless, some researchers have interchangeably used words like "staff development" "teacher development" "professional development" and "in-service education" to refer to any

strategies or activities introduced to promote lecturer professional development with the vital objective of improving student learning, development, and achievement. In Vietnam, teacher professional development is considered to include any activities, both inside or outside schools, designed to help teachers improve and enhance their personal (moral qualities) and professional (including subject and pedagogical knowledge) growth with the ultimate aim of improving student achievement (Ministry of Education and Training or MOET 2012; Nguyen 2009; Nguyen 2013; Pham 2001; Tran et al. 2020). In this study, staff professional development or teacher professional development will be widely and purposefully used to suggest "a process whereby teachers become more professional in both personal and professional qualities" (Dean 2009: 5). It includes activities inside and outside the school (Qian et al. 2017; Timperley 2011; Tran and Nguyen 2019).

#### ***Significance and Purposes of Teacher Professional Development***

A teaching career is inoble but increasingly challenging (Dean 2009). Ridden (2008) also pointed out that "teaching is a demanding job" (p.30). It is more demanding today than ever before (Swafford 2017). Teachers are expected to be not merely the providers of knowledge but the nurturers as well. In Vietnam, teachers are expected not only to provide their students with theoretical and practical knowledge but also to help their students to develop socially, culturally, physically and morally (Nguyen 2009; Tran and Nguyen 2019; Vasavakul 2019). They are required to have both "duc" (moral qualities) and "tai" (professional competency) (Tong 2012; Tran et al. 2020; Vasavakul 2019). Successful teachers not only teach their students academic knowledge and skills needed for future career success but they also teach them how to live meaningful and useful lives.

The core purpose of the school is to provide high-quality learning experiences and opportunities for the students to grow to their potential (Bradley 2015; Sparks and Loucks-Horsley 2018; Tran and Nguyen 2019). The ability of teachers to do this depends on the teachers' knowledge, dispositions and attitudes (Newmann et al. 2013).

Thus, professional development for teachers has received attention from authorities, principals and teachers themselves (Bradley 2015). Teachers' growth and development impinges upon student learning and achievement in particular and school improvement in general (Fullan 2011; Fullan and Hargreaves 2016). DuFour and Berkey (2016) argued that, "The key to school improvement is people improvement. Attention to professional development must be the cornerstone of any initiative to enhance the effectiveness of schools" (p. 20). Likewise, Bradley (2015) maintained that any attempt to improve children's learning depends on some forms of teachers' growth. Sparks (2012) also stated that, "Quality teaching makes a difference in student learning... The professional learning of teachers is a central factor in determining the quality of teaching" (p. 1). Sergiovanni (2001) affirmed that teacher learning is a key ingredient in any attempt to improve schools.

Additionally, in Morrow's study (2018), the results concluded, "Excellent teachers are well-prepared teachers who continue to participate in professional development during their careers" (p. 7). Never before has there been a greater significance of vital roles of teacher professional development. Almost all the plans to reform or improve schools focus on teacher professional development as the main factor in making efforts to implement needed changes (Kaplan and Owings 2009). Eshiwani (2015) supposed that, there is a need for continuous upgrading and training programmes for teachers for long-term and short-term professional learning plans because the improvement of teacher quality competency results in the improvement of teaching and learning at school. Moreover, teachers should maintain professional learning to strengthen and improve their different knowledge, methods and skills and to foster quality teaching and educating processes. Kaplan and Owings (2009) emphasised that teacher education must be seen as "a gradual sequence of experiences in professional growth that begins at the initial stage at the college level and is followed by further in-service training cycles as a continuity and reinforcement of training and growth throughout the teacher's career" (p. 45).

Teachers must continue learning throughout their lives, or they will soon become obsolete, as Dean (2009) warned that the quick knowl-

edge content and methodology changes for teachers to adapt. Dean (2009) had a similar view when he stated that besides the changes from the different authorities and government, teachers have to face the changes and challenges originating from the rapid knowledge development, which is making existing knowledge and skills outdated quickly.

Bradley (2015) stated that at a time of continuous pressures upon schools and teachers to implement changes in curriculum and in accountability and so on, the need for teacher professional development is being recognised as vital significance. According to Bradley (2015), LPD has the following purposes including making teachers feel valued in their teaching career, enabling them to teach well so that they receive the positive feedbacks from their colleagues, students and students' parents that are essential for their job satisfaction and motivation, helping them to prepare well for changes and challenges in their job, encouraging them to nourish satisfaction from their participation in required changes, and making them feel satisfactory, ready and competent to make constructive contributions on the development and achievements of their school.

As a result, teachers must continue to research and practice in order to improve their quality, ethics, integrity, and specialization standards, as well as to set a good example for students. (The National Politics Publishing House (TNPPH) 2019). Similarly in Vietnam, Nguyen (2009), one of the first professors of Viet Nam pointed out that teachers have to learn everywhere, every time, from everyone, through every means. They should learn from both, the better and the least people, and know how to learn from themselves. Learning with the research method that means not receiving the knowledge passively, but knowing how to discover contradictions and problems and try to find solutions... Everyone should learn that way, as the key answer of success for teachers is to make the training process become the self-training one. Teachers themselves could not teach their students to know how to self-train unless they have a good method of self-training (p. 397).

Wideen (2015) claims that LPD is essential for three reasons: improved understandings and application of the enlarged knowledge base in

teaching, providing insights into resolving ongoing social complexities in school work, and self-renewal.

### ***Features of Effective Teacher Professional Development***

Many educators have sought to identify what constitutes successful professional growth (Desimone et al. 2008; Loucks-Horsley et al. 2018). Effective professional development strategies are created to assist teachers in developing new understandings of teaching and learning through hands-on experiences with techniques that help students learn in new ways (Darling-Hammond 2006; Hea-Jin 2011; Sparks and Loucks-Horsley 2018). The features of effective teacher professional development, according to Desimone et al. (2008), include a focus on content and how students acquire contents, in-depth, active learning chances, links to high standards, chances for teachers to engage in leadership roles, extended duration, and collective participation of groups of teachers from the same school, grade, or department. Efficient professional growth, according to Newmann et al. (2013), "should focus on instruction and student results in teachers' individual classrooms, provide opportunities for collegial inquiry, support, and input, and link teachers to external expertise while maintaining teachers' discretion and creativity" (p. 259). Loucks-Horsley et al. (2018), on the other hand, upheld the values that form positive professional development experiences.

They are guided by a clear vision of effective classroom learning and teaching, provide chances for teachers to expand their knowledge and skills, apply or model the strategies that teachers can use with their students, foster a learning community, support teachers in leadership roles, provide links to other parts of the educational system, and are continually evaluated to make improvements to ensure positive influences on teacher quality, student learning, and the school (p. 268).

Many researchers suggest that an isolated or 'one-shot' event or professional development activity is not effective. Newmann et al. (2013) contended that teachers' professional growth should be long-term and ongoing, rather than short-term and episodic. Likewise, Guskey (2010) argued,

in any successful change efforts, “[P]rofessional development is not an event that is separate from one’s day-to-day professional responsibilities” (p. 38). It should be much better that teachers’ professional learning is “on going activity woven into the fabric of every teacher’s professional life” (p. 38). Individual teachers need a wide range of professional learning opportunities that satisfy their needs in training programs as well as their demands in advanced practice (Hallinger et al. 2021; Newmann et al. 2013; Pham 2001; Tran et al. 2020; Somprach et al. 2016). Collegial work and team teaching environments, school improvement networks, and school/university collaboration including professional development schools, provide the most beneficial improvements to professional development (Darling-Hammond 2006).

To conclude, the above-suggested characteristics of effective professional development should be taken into consideration by relevant educational authorities to provide teachers with the optimal chance of learning. Darling-Hammond and McLaughlin (2016) provide a number of questions to take into consideration for related people when setting up and implementing effective professional learning. Those include: “Does the professional development allow for adult learning? Does it allow for teachers to construct their own meanings? Does it support the school as a community of lifelong learners?” (p.34). It appears that these questions are important for educational authorities in the Vietnamese higher education context to bear in mind when organising strategies for their lecturers’ professional development. This above-mentioned information fits with the Vietnamese educational setting.

### ***Ha Tinh University’s Background***

Ha Tinh University is a local one belonging to Ha Tinh provincial People’s Committee, which has received a lot of investment and support from Ha Tinh province. There are 360 staff including 220 lecturers and 5000 current students. Ha Tinh University consists of the following main faculties: the management board (a President and two deputy Presidents), five faculties (Economics-Business Administration, Foreign Languages, Technology-IT, Theories and Poli-

tics, Teacher Education), four administrative departments (Academic Affairs, Organisation-Administration, Institute of Continuing Education and Students Affairs), and five other sections (Psychology-Education, Physical Education, Library, Facilities, and Accountancy). According to the University reports, HTU has awarded many rewards and certificates of achievements by the Provincial People’s Committee and the MOET. It was given the “Huan chuong lao dong nhÿt” (the First Grade Labour Medal) by the State president for its great contribution to the development of the province in society and economy in particular and the country in general for many years.

For improved educational quality, HTU has maintained a constant focus on enhancing the quality of its teaching staff. The President affirmed that LPD is considered to play a vital role in the University’s achievements in general and in the successful implementation of CDIO-based curriculum. In order to have continuous improvement of training quality for graduates of HTU to meet the increasing needs of employers and the working market, a lot of solutions have been applied and one of those is the implementation of the CDIO-based curriculum at HTU since the school year 2016-2017.

In the late 1990s, the Massachusetts Institute of Technology (MIT) in the United States came up with the concept of CDIO (Conceiving, Designing, Implementing, and Operating). A few years later, in 2000, MIT formed the CDIO Initiative in collaboration with three Swedish universities: Chalmers University of Technology, Linköping University, and the Royal Institute of Technology (Malmqvist et al. 2017). It grew into a global collaboration, with universities from all over the world adopting the same framework (Bennedsen et al. 2019; Malmqvist et al. 2017). According to Wee (2010), CDIO is an engineering education model that has been adopted by leading engineering institutions in the United States, Europe, Canada, the United Kingdom, Africa, Asia, and New Zealand. The CDIO Initiative, according to Wee (2010), is an innovative educational framework for producing the next generation of engineers.

Until now, more than 180 institutions in over 45 countries have adopted CDIO as the framework for their curriculum development (Benned-



sen et al. 2019). In Vietnam, the implementation of the CDIO initiative is still in its early stages. Two Vietnamese national universities, Hanoi National University and Ho Chi Minh National University, used CDIO in some training programs at their institutions in the 2009-2010 academic year (Dzung 2012; London 2011; Trinh and Khiem 2012), and CDIO-based training programs have been used in eight universities in Vietnam to date (Hai Binh 2019).

At HTU, CIDO-based training curriculum was implemented in the school year 2016-2017 after some years of preparation including conferences/seminars on CDIO Initiative, inviting CDIO specialists to provide training courses to lecturers, and sending lecturers to different conferences/seminars/training courses in other higher education institutions where they had applied CDIO-base curriculum.

## METHODOLOGY

### Research Design and Instrumentation

This investigation used a qualitative case study research design (Yin 2014) to outline different LPD strategies at Ha Tinh University in Central Vietnam (hereinafter referred to as the University or HTU). Qualitative research examines and attempts to explain phenomena in natural and specific situations and/or settings by closely examining people's actions, words, and records (Denzin and Lincoln 2017; Maykut and Morehouse 1994; Patton 2015). The goal of this qualitative case study is to make it exploratory-explanatory (Yin 2014). The credibility of the study data collection is ensured by the triangulation of data sources, which includes interviews with the President and five faculty deans, open-ended questionnaires with lecturers, observations, and policy-related-document analysis, as well as the credibility (member checks with the confirmation of interview contents collected with the President and faculty deans) (2015). The research sample selection, data collection methods, and data analysis methods will be discussed.

### Sample Selection

Purposeful sampling was used in this study to find "information-rich cases whose study will illuminate the questions under study" (Patton

2015: 169). Ha Tinh University was selected because of its significance in Ha Tinh Province, Central Vietnam, in terms of achievements, and because it is implementing the new CDIO-based curriculum change. The University's President and faculty deans were listed as key people to speak with about their views and beliefs about lecturer professional growth, as well as how they put those beliefs into action to promote LPD. The permission to distribute questionnaires to lecturers was also required, so these HTU managers were crucial.

### Data Collection

Semi-structured interviews (10-15 questions) with the President and five faculty deans from five faculties (Economics and Business Administration; Technology-IT; Foreign Languages; Teacher Education and Theories and Politics), open-ended questionnaires distributed to lecturers, and direct observations of TPD strategies at the University all contributed to the data. Semi-structured interviews (Patton 2015) were conducted to learn more about the President's and the other five faculty deans' experiences and leadership styles, as well as the relevance of LPD activities for their lecturers. At the President's and faculty deans' offices, each face-to-face interview lasted about 60-75 minutes.

Lecturers' viewpoints were conveyed through an open-ended questionnaire (14 questions) that concentrated on their perceptions of the importance of the University's professional development practices for them. At faculty meetings, 200 open-ended questionnaires were distributed at random, and 165 were returned (an 82.5% response rate). The researchers also studied LPD activities over a three-month span to get more detail and confirm what had been recorded and interpreted by HTU managers and lecturers. The researchers used research notebooks to keep track of the President's, deans', and lecturers' LPD-related events and behavior. HTU or Ministry of Education and Training policies were also gathered and used. These observations and policy documents added to the triangulation process, which ensured the credibility of the results announced (Patton 2015). Before the data collection process was conducted, consent forms had sent to the President and other partic-

ipants for their approval and voluntary participation in this research, as an important step of ensuring ethical considerations (Denzin and Lincoln 2017; Maykut and Morehouse 1994).

### Data Analysis

The researchers used ‘within-case analysis’ in this case study (Miles and Huberman 1994; Patton 2015). The case analysis included creating comprehensive write-ups for HTU based on the research’s main points. Analytical procedures began with coding data from various sources. To begin, the interview transcripts and lecturers’ responses to the questionnaire that were closely related to the University’s CDIO-based curriculum implementation were read in order to create initial codes. The codes were then linked to the LPD strategies made by the investigator-in-chief as well as other policy documents. Finally, the data were organized into a case record (or database) for the University (Patton 2015). Open coding, axial coding and the constant comparative method (Patton 2015) were used to produce the list of ideas and perceptions that emerged during the data synthesis process. The categories were created by searching for commonalities, trends, and contradictions among various stakeholders (Patton 2015).

## RESULTS

### HTU Managers’ Perceptions of the Significance of TPD

The significance of a quality teaching staff was recognised by HTU management board including Mr. Doan, the President, five faculty deans and the lecturers who acknowledged the important role of good lecturers in students’ learning and achievements and HTU’s training quality improvements and success as a whole. Mr. Doan, the President and all the five faculty deans repeated a popular Vietnamese saying that ‘khong co thay do may lam nen’ (You cannot be successful without the lecturer’s support and guidance).

Mr. Doan, the President said that the quality of teaching of staff was one of the most significant factors affecting students’ successes. In his views, “*I want to confirm again that there*

*could not be good students without good lecturers... And quality teaching staff play a decisive role in the quality and success of students that results in the university achievements, in education quality, research quality and community service quality as well, especially during the Industrial Revolution 4.0 and we are targeting to provide graduates with practical skills and knowledge to work and live better”* (interview with Mr. Doan, the President).

*The quality of staff teaching comprises professional capacities, accountability for work, moral qualities, and love of the teaching profession... These years, we have been implementing the new CDIO-based Initiative Curriculum that focuses on outcomes and real practices while learning to meet the increasing needs of the socio-economic developments of the country and the world. The teaching staff will face a lot of challenges and they should pioneer in the process of current curriculum changes to make it successful... We promote the LPD of lecturers focussing on CDIO-based curriculum adaptation, implementation for the objective of training students well to become competent graduates in the future.* (Mr. Doan, the President).

The important roles of professional learning for teachers’ improvement, especially during the current change implementation of the CDIO-based curriculum at HTU, was recognised by Mr. Doan, the President:

*Professional training and upgrading in this time of CDIO-based curriculum application for teaching staff is inevitable and vital... In order to be used as the new curriculum in competent ways, professional development must be urgent, regular and continual. It must be their responsibility for their job. Good lecturers will result in the current curriculum change successes. Students’ successes mainly depend on teachers’ capacities and qualities... To me, when lecturers continually study and improve, the university will become a learning community and lecturers at the time set good examples for their students. This is especially vital because those students will be employees taking part in the working market, contributing to the development of the country or even the world and being responsible citizens for the nation”.* (Mr. Doan, the President).

Mr. Doan, the President’s, perspectives were reinforced in different faculty deans’ views in a

similar vein. For example, Mr. Hoang, Dean of Economics and Business Administration, elaborated:

*As for me, the quality of any teaching staff is of course very important to the quality of education and research at higher education institutions or in other words, to the success, studying results, and practice of students. Although the decisive factor depends first on each student's efforts, lecturers have an important and direct impact on the quality of each student. It is more significant these days as the CDIO-based curriculum has been carried out and my lecturers as part of the faculty should try their best to enhance their professional knowledge and teaching skills (the interview with Mr. Hoang, EBA).*

Other four faculty deans all highly appreciated the importance of the teaching staff in terms of their professional knowledge, teaching skills, research quality and attitudes in similar views. Specifically, Mr. Tran, dean of Foreign Languages (Mr. Tran, FL), explained:

*To master the new CDIO-based curriculum, textbooks, IT skills and teaching methods for improved teaching and research, especially for the current application of the CDIO-based curriculum in foreign language courses, my lecturers play an active part... New curriculum is associated with new teaching methods, IT application and other related skills. Thus, in order to teach better, lecturers must continually improve their professional capacities and update their new knowledge... If lecturers are not provided with good professional development, they cannot keep up to date with the changes within the current reforms and curriculum changes and therefore cannot satisfy requirements and fulfill their responsibilities at university level. (Mr. Tran, FL)*

Mrs. Nguyen, one female dean of Teacher Education (Mrs. Nguyen, TE) further stated that during this period of CDIO-based curriculum implementation at HTU, professional development was more important. This was because lecturers at this Faculty of Teacher Education had to master changes of the current educational reform initiated by MOET in line with the CDIO-based curriculum application at HTU to train would-be teachers better. Thus, lecturers must find creative ways of applying CDIO-based curriculum to their real course teaching to support their stu-

dents more and more. Thus, “[L]ecturers must master all those, especially the new teaching methods and instructions related closely to the CDIO-based curriculum application at HTU. They should apply the new teaching method to their lessons to support their students the most in terms of knowledge, skills for future jobs. This is valuable for would-be teachers for they are provided with both theories of teaching methods and demonstrations and examples by their lecturers. So, would-be teachers will become good teachers after graduation” (Mrs. Nguyen, TE). Mr. Minh, Dean of Technology, IT, also noted, “if lecturers do not have continual professional development, they will lag behind and will not meet requirements as stipulated by MOET and Education Law and required by HTU for the successful application of the CDIO-based curriculum in recent years” (Mr. Minh, TIT).

These above-mentioned things indicated the President's and different faculty deans' understanding change and to make changes productively and successfully (Fullan 2011). Also, the perceptions of the President and faculty deans seem to echo the literature reviewed. Specifically, three reasons of promoting LPD for lecturers (Wideen 2015), the principles for effective LPD (Loucks-Horsley et al. 2018), the viewpoint on sustained and continuous LPD for lecturers (Newmann et al. 2013), the significance of LPD for students' improvements, education quality and the school achievements (Bradley 2015; Dean 2009; Hallinger et al. 2021; Sergiovanni 2001; Sparks 2012; Sparks and Loucks-Horsley 2018) were evident in the perspectives of the President and faculty deans that can be transferred into their actions of promoting LPD more productively and effectively.

### **HTU Lecturers' Perceptions of the Significance of LPD**

In response to HTU managers' perspectives on the importance of teaching staff improvement and significance of LPD in a time of the current CDIO-based curriculum application at HTU, all 165 lecturers, who had sent back their questionnaires, had similar views and they themselves realised this. In fact, they agreed in terms of the significance of teaching staff enhancement. They



considered professional development as an important tool for them to update and upgrade their needed subject knowledge and skills for meeting the CDIO-based curriculum implementation successfully. Statements such as *'the teaching staff quality has an important and direct role for students' successes'*, *'lecturers' quality is the prerequisite of students' achievements and the success of the CDIO-based curriculum application'*, or *'good lecturers result in good students and successful implementation of the new curriculum'* can be found in all 165 questionnaires got from HTU lecturers. When answering the question *'what is your perception of the lecturer's role for his/her students' success?'*, many adjectives such as *'important'*, *'significant'*, *'very important'*, *'specially important'* are in the questionnaires. Significantly, 125 lecturers use the adjective *'decisive'* in their answers and the statement *'co thay gioi thi at se co tro gioi va chat luong day hoc tot'* (good lecturers will surely produce better students thanks to quality teaching and research) is found in many lecturers' questionnaires.

One lecturer with 14 years of teaching elaborated:

*Although many factors affect a student's success and achievements, the lecturers' factor is very important, even decisive in some cases. When a student is very willing and ready to learn, if that student is guided, supported, and taught by a good lecturer in terms of professional capacities and moral qualities, he/she will be more likely to develop more fully and perfectly.* (Lecturer questionnaire number 5, referred to as L5)

Another one mentioned the need of LPD for him, *"participating in professional development strategies has improved my professionalism. I do it first for my job at HTU, then requirements from HTU or MOET"* (L28).

A female lecturer with twenty-six years of teaching experience, while having the same idea, also elaborated upon the concept of the good lecturer in the Vietnamese setting:

*The quality of teaching staff impacts students. For me, it seems a cause-effect rule that having good lecturers results in having good students and the training quality improvements as a result. Nevertheless, good lecturers are good in terms of both professional knowledge and moral character. Those kinds of good lecturers can produce students with both knowledge, and*

*professional skill and good character who can serve for the good of the country.* (L14)

One lecturer even noted, *"...LPD helps me preserve the honour of a good lecturer"* (L25), *"During the current application of the CDIO-based curriculum, lecturers' professional development is very important. We have to be good at both subject knowledge and teaching methods and related skills to contribute more to this innovation"* (L1). Another stated, *"if LPD is not done well and effectively, all changes of the educational reform cannot be as successful and efficient as desired"* (L39).

Only a few lecturers had slightly different opinions on their LPD related to the CDIO-based curriculum at HTU. One lecturer noted, *"Seniors put too much pressure on LPD on implementing CDIO-based curriculum because they want to speed the process. In my opinion, I think we need more time to find out more information on CDIO and how to implement it successfully"* (L72).

The literature also highlighted the lecturers' role in implementing successful reform efforts (Bradley 2015; Guskey 2010; Hallinger et al. 2021; Newmann et al. 2013; Nguyen 2009; Tran et al. 2018; Tran et al. 2020). According to Fullan (2011) and Newmann et al. (2013), teachers are the day to day people who directly implement the changes. Almost all the lecturers agreed that the motivation to have professional development at this time of CDIO-based curriculum implementation originated from their own desire and need to improve, and especially for the urgent requirements of the University for the CDIO training quality enhancements to retain their students and attract more students for their University. This was confirmed by their University's documents and regulations relating to professional requirements related to CDIO-based curriculum implementation at HTU. In the words of two lecturers, *"The desire to have professional development stems from my commitment, conscience, and responsibilities, and also the urgent requirements of my University to meet the increasing needs of students and the employers later"* (L15 and L79).

## DISCUSSION

In general, the President, five faculty deans and lecturers in Ha Tinh University were all aware of the value of LPD to the effectiveness of teaching staff, the successful implementation of new

CDIO-based curriculum currently including Business Administration one. The international research also related lecturers' professional learning and improvements to students' learning and achievements (Darling-Hammond and McLaughlin 2016; Fullan 2011; Qian et al. 2017).

HTU managers all appeared to realise that professional development for their lecturers was an integral factor to the maintenance and promotion of quality teaching, research and learning, especially at the current CDIO-based curriculum implementation. They all mentioned a close link between 'good lecturers' and 'good students' toward the achievements of their HTU. These seem to confirm what previous researchers found out (Hallinger et al. 2021; Kaplan and Owings 2009; Tran and Nguyen 2019; Tran et al. 2020). They also argue that professional development for lecturers is a primary factor to carry out the implementation of the CDIO-based curriculum application at HTU successfully.

Overall, almost all the lecturers of the five faculties agreed with their President and Faculty deans. They were conscious of the important role of continual professional learning to their improvement and their job requirements related to the newly CDIO curriculum. The lecturers emphasised the need for professional development to help them to satisfy the requirements and ensure the success of CDIO curriculum reforms. Most lecturers seemed to realise their strange position of being 'simultaneously, both the subject and the agent of changes of the current curriculum reforms' (Fullan 2011; MOET 2012). Most lecturers expressed a desire to acquire the new knowledge, new teaching methods linked to the newly CDIO curriculum application, to some extent, to satisfy the requirements of HTU managers.

Almost all lecturers wrote of their own motivation before making a mention of requirements and requests from their HTU managers. Internal commitment was also highlighted in the international literature (Fullan 2011; Sparks and Loucks-Horsley 2018). It appears that the tradition of 'ton su trong dao' (respecting teachers), the desire of preserving the honour of the teaching profession (Tong 2012), and maintaining and improving their own fame and prestige have also motivated the teachers towards professional development. In general, the lecturers regarded

professional development as important for them because it could help them to develop 'tai' in parallel with 'duc'. Only few lecturers seemed to be suspicious or reluctant of the LPD requirements related to the current curriculum implementation, which was different from their managers and colleagues. This could be normal, as noted in the literature.

### Limitations of the Research

The single-site case study is the source of the limitation. While this design enabled the authors to focus on one specific case, the findings cannot be applied to other Vietnamese universities. In addition, the students' voices can be added to make a more diverse range of perspectives on the significance of TPD for the successful implementation of the CDIO-based training courses including the Business Administration one.

### CONCLUSION

In general, the Western literature was useful in the Vietnamese educational setting to the extent that the current implementation of CDIO-based curriculum in Ha Tinh University, Vietnam, supports student-centred learning and active participation by students to develop student future knowledge and skills needed for the increasing labour market requirements. These things are often taken for granted in Western universities.

In general, the President, five faculty deans and all 165 lecturers of HTU realised the significance of lecturers' professional learning on the quality of teaching and for an enhancement of students' learning and better chances of the successful CDIO-based curriculum implementation. The President, five faculty deans and all 165 lecturers of HTU highly appreciated lecturers' professional development during the time of the current CDIO curriculum implementation in HTU as essential. An understanding of the causal relationship between 'good lecturers' and 'successful graduates' was evident in the President's and five faculty deans' interviews and almost all 165 lecturers' questionnaires. These beliefs are consistent with the reviewed literature.

This study has the potential to add to the body of knowledge in the field of lecturers' pro-

professional learning in a Vietnamese university setting, as well as to the international LPD literature. The study also backs up previous attempts in Western countries to summarize lecturer technical learning perspectives.

The requirements for lecturers to grow and enhance their new professional knowledge and teaching method/research skills to meet the requirements of successful implementation of the current CDIO-based curriculum at HTU has reinforced the significance of LPD as the development strategy of HTU for the period of 2020-2025 and for the vision to 2030. This can be one of the earliest studies on the perceptions of relevant staff at a higher education institution regarding the CDIO-based curriculum implementation in the Vietnamese context.

### RECOMMENDATIONS

The findings of this study can provide a variety of recommendations. First, the findings of the study have aided in the development of critical recommendations and foundations for improving LDP related to CDIO-based curriculum implementation at Ha Tinh University and other higher education institutions in Vietnam in general. Furthermore, in the wider contexts of Vietnamese higher education institutions, the findings of this study will have important considerations and consequences for leaders at various levels in order to find ways to improve LPD. Future research should provide a larger group of participants in order to gain a greater understanding of the generalizations and experiences of participants from a more in-depth interview. Future research will be needed to confirm the extent to which Ha Tinh University is representative of the Vietnamese higher education system, by examining the extent to which the size and diversity of staff expectations in LPD related to the CDIO-based curriculum implementation at Ha Tinh University is representative of Vietnamese higher education settings in general.

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