Complexities in Teaching Competencies: A Longitudinal Analysis of Vietnamese Teachers' Sensemaking and Practices

Bich-Hang Duong, Vu Dao, Joan DeJaeghere

Abstract

Education systems globally are implementing competency-based education (CBE) reforms. Vietnam's leaders have also adopted CBE in a comprehensive reform of its education since the early 2010s. Although the global idea of CBE has been widely adopted and recontextualized in various educational contexts, implementing the reform at the local level (e.g., teachers in schools) is never a linear and simple process. Given the complicated sensemaking process of competency and competency teaching, this study explores how Vietnamese teachers made sense of key competencies and adapted their teaching to competency development. Informed by a sociocultural approach and the sensemaking perspective, this study draws from a dataset of 91 secondary teachers collected over three years (2017-2019), with a particular focus on longitudinal analysis of eight teachers. The findings shed light on teachers' ambivalence as they made sense of the target competencies and aligned their practices with the new CBE reform. Based on their prior experiences and worldviews, teachers made sense of competencies as learning foundational knowledge and skills, in addition to developing good attitude, character, and morality. Over the years, they placed a stronger emphasis on the competencies' process-orientation, integration, and real-life application toward whole-child development. Despite teacher sensemaking and changing practices, the performativity culture for high learning outcomes still prevailed, making teaching competencies for life a challenging task. Contributing to the CBE literature and practice, this study illustrates the long and complicated process through which teachers recontextualize the CBE pedagogy. It also suggests how teacher practices can be better supported to transition to the new CBE curriculum.

Key words: competency-based education (CBE), curriculum reform, secondary education, teachers' sensemaking, teaching practices, Vietnam.









Complexities in Teaching Competencies: A Longitudinal Analysis of Vietnamese Teachers' Sensemaking and Practices

Bich-Hang Duong University of Minnesota hangduong.lehigh@gmail.com

Vu Dao University of Minnesota daoxx127@umn.edu

Joan DeJaeghere University of Minnesota deja0003@umn.edu

This is one of a series of working papers from "RISE"—the large-scale education systems research programme supported by funding from the United Kingdom's Foreign, Commonwealth and Development Office (FCDO), the Australian Government's Department of Foreign Affairs and Trade (DFAT), and the Bill and Melinda Gates Foundation. The Programme is managed and implemented through a partnership between Oxford Policy Management and the Blavatnik School of Government at the University of Oxford.

Please cite this paper as:

Duong, B.H., Dao, V. and DeJaeghere, J. 2022. Complexities in Teaching Competencies: A Longitudinal Analysis of Vietnamese Teachers' Sensemaking and Practices. RISE Working Paper Series. 22/119. https://doi.org/10.35489/BSG-RISEWP_2022/119

Use and dissemination of this working paper is encouraged; however, reproduced copies may not be used for commercial purposes. Further usage is permitted under the terms of the Creative Commons License.

The findings, interpretations, and conclusions expressed in RISE Working Papers are entirely those of the author(s) and do not necessarily represent those of the RISE Programme, our funders, or the authors' respective organisations. Copyright for RISE Working Papers remains with the author(s).

Introduction

In efforts to improve schooling and student learning globally, attention has turned to teachers and teaching practices (Bengtsson et al., 2020; UNESCO, 2016). With the globalization of education evident in the Sustainable Development Goals (Goal 4 is focused on quality education) and OECD international assessments, including PISA and TALIS, the policy and public discourse have emphasized 'what works' and what 'lessons learned' can be transferred across education systems to improve teaching and learning (see Meyer & Benavot, 2013). However, this global focus on the quality of teaching presents a dilemma because teachers and teaching are deeply embedded in cultural and political systems of meaning. At the same time, they are affected by global discourses, policy transfers, and global assessments. Burn and Menter (2021) have argued regarding how policies affect teachers, that researchers need to understand the dynamic relationships between global influences on teacher policies and their sociocultural embeddedness within institutions (schools), communities, and countries. To examine these dynamics, a pluralistic theoretical framework is necessary to explain teacher practices in relation to policy reforms.

One of these global policy reforms is competency-based education (CBE) (Anderson Levitt and Gardinier (2021) that, similar to student-centered learning or other traveling pedagogical reforms (Komatsu et al., 2021; Schweisfurth, 2011), requires teachers to reconsider their understanding of and pedagogical practices for learning. As implemented in Vietnam, CBE has been enacted to shift teachers' focus from teaching content toward teaching a set of general and discipline-specific competencies. Yet the changes intended by the reform are subtle, as we will show in this paper, in part because of the slipperiness of the concept of 'competencies,' and partly because of how teachers make sense of it within their own context and experiences. As Anderson Levitt (forthcoming) has argued, competencies take on diverse meanings within specific educational contexts, and different actors (i.e., policymakers, teachers, parents, students) may value competencies differently. For example, critical thinking may be valued by some parents in Vietnam, but policymakers may not appreciate it to the same extent. Therefore, when enacting a competency-based education reform, teachers are negotiating and re/contextualizing their

understanding of these competencies, within a multitude of influences, including global definitions, national values, local needs, and teachers' own experiences.

In this paper, we seek to answer the following questions about teachers' sensemaking of the new competency-based curriculum reform in Vietnam:

- 1. How do teachers make sense of competencies and competency development?
- 2. How do teachers' teaching practices of competencies such as communication change over time, if at all?

To explore teachers' sensemaking of competency-based education (or CBC in Vietnam), we use a pluralistic framework and multi-scalar methodology to examine how global meanings interact with and get recontextualized by teachers in local contexts. Such a framework engages with Appadurai's (1996) notion of 'vernacular globalization,' which captures how idiosyncratic manifestations of diverse forms of policies result from the interactions between the local microcontext and global influences.

In this paper, we describe the ambivalent ways that teachers made sense of competencies, at times equating them with skills and at times contrasting them. This ambivalence is in part because CBE is a new concept in Vietnam, while both domestic and international scholars continue to use the terms competency and skills interchangeably. Our analysis captures how 'competency' is given local meaning as the global policy idea of CBE enters Vietnam's curriculum reform discourse. This study contributes to the literature on global education reforms by illustrating the nuanced and intricate ways teachers make sense of these ideas and alter their practices. Our research suggests that global pedagogical reforms do not simply and immediately get enacted, nor are there easy lessons learned that could travel to other contexts. Rather, changing teacher practices takes years of conceptualizing, enacting and recontextualizing meanings within specific local ideas and embodied practices of teaching and learning.

A Sociocultural Approach to Teachers' Sensemaking

Our framework for analyzing teachers' sensemaking of CBE utilizes a sociocultural approach of teachers' experiences and constructions within national and global discourses about the reform (Burn and Menter, 2021; Marginson & Dang, 2007; Vavrus & Bartlett, 2013).

A sociocultural approach requires researchers to pay attention both to the power of the symbolic tools that mediate this relationship and to [the] influence of past experience on both the individual and the global, national and institutional contexts in which they are embedded. (Burn and Menter, p. 773).

Some important symbolic tools for teachers and teaching in Vietnam include the concepts of active learning and child-centered pedagogy; they also include artifacts that teachers use, which take on a symbolic meaning related to learning, such as lesson plans, textbooks, or assessments. Symbolic tools at the national or global level include discourses about competency-based education and about Vietnam's success in learning outcomes. These symbolic tools and artifacts figure into teachers' imaginations of what teaching is and its purposes for producing quality education.

A sociocultural approach is also consistent with the sensemaking perspective. Both give attention to teachers' experiences and worldviews as they continuously reflect on and construct their teaching and learning practices in the classroom. Making sense of a new practice is more than simply 'encoding' information about a concept or a phenomenon. Sensemaking is a complicated and 'muddy' process involving active cognitive and emotional change as individuals interact and construct meanings of the environment surrounding them (Muniz, 2020; Spillane et al., 2002; Weick, 1995). Educational research suggests that when confronted with a particular reform policy or an education innovation, teachers feel ambiguity and anxiety before they interpret and implement these changes (Lwin, 2019; Muniz, 2020; Weick, Sutcliffe and Obstfeld, 2005). As teachers make sense of and enact these policies, they draw on their worldviews, including their pre-existing knowledge, experiences, values and belief systems (Coburn, 2001; Spillane et al.,

2002; Weick, 1995). With these characteristics, sensemaking is viewed as an evolutionary or "socialization" process where "people create their environments as those environments create them" (Weick, 1990, p. 34). Thus, through their ongoing sensemaking processes, teachers engage in reconstructing and reshaping the policies, practices, or their organizational contexts during implementation (Weick, 1995).

The sociocultural approach to teachers' sensemaking of competency-based education in this study will highlight two aspects: how past practices of teaching influence the present, and how new ideas require time to process and re-contextualize. At the same time, it sheds light on the impact of mediating artifacts on teachers' sensemaking and practices, including the idea of whole-person development, which emphasizes the cultivation of good attitudes, character and moral values. For this reason, our methodology utilizes a longitudinal qualitative design (more below). To understand teachers' sensemaking of competencies, we analyze interviews, teaching videos, and video-cued reflections with teachers.

In addition to teachers' experiences and constructions, we are also interested in how they enacted teaching practices in relation to the new curriculum in schools across different geographical locations in Vietnam. The subjects and students that teachers teach also influence how they make sense of their teaching practices. We show teachers' changing constructions of competencies through teaching both math and language subjects; teachers are also affected by the school environment as well as larger community and national discourses about what good quality teaching is.

Finally, global pedagogical ideas and reforms also influence how teachers think about their teaching, specifically how the competency-based curriculum reform has been designed, developed, and implemented. To explain teachers' sensemaking of competency-based curriculum and their practices for teaching it, we discuss the CBE reform, and related prior pedagogical reforms, in Vietnam in the next section. We also discuss how competencies are defined in the new curriculum and how CBE is being implemented.

Competency-based Curriculum Reforms and the Vietnamese context

The last three decades have witnessed a transnational flow of competency-based education (CBE), an approach that focuses on developing students' knowledge, skills, and attitudes (OECD, 2005) to achieve "[the] ability to perform in a given context and the capacity to transfer knowledge and skills to new tasks and situations" (Mayer, 1992, p. 4). While CBE is not yet a global education phenomenon, over sixty countries in various parts of the world have adopted this model, at least in their policies for compulsory elementary and/or secondary education (Anderson-Levitt & Gardinier, 2021). CBE is also promoted by international organizations such as the Organization for Economic Co-operation and Development (OECD), the European Union (EU), and the United Nations Educational, Scientific and Cultural Organization (UNESCO) as an approach to developing individuals with a wide range of competencies to function successfully in globalized and modernized societies, and to contribute to technological advancement (OECD, 2005).

Even though a competency-based approach has become more widespread in education systems, CBE and competencies are polysemic terms (Anderson-Levitt & Gardinier, 2021) and are defined by those who use it (Kerka, 1998). Initially rooted in a framework for vocational training, CBE reforms were broadened to include general education instruction and learning during the teacher education movement in the U.S. in the 1960s (Ford, 2014, Kerka, 1998). Since then, systematic instructional design and curriculum development have been applied to CBE to specify what a learner should be able to perform at a certain level after an instruction period (Brown, 2014). Generally, studies of CBE refer to several common characteristics, such as (1) students must demonstrate mastery of required competencies, (2) once demonstrating mastery, students can move to a higher level, (3) students are assessed using multiple measures, and (4) students earn credit toward graduation in different ways other than seat time (Torres et al., 2015). In the following sections, we review the rationales that informed the spread of CBE, the challenges in implementing it, and the shift towards CBE in Vietnam.

Rationales for the diffusion of CBE and critiques

A dominant rationale underlying the transnational movement of CBE stems from a human capital perspective, which regards skills, knowledge, and competencies as critical for learners to fully function in society (Anderson-Levitt & Gardinier, 2021; Takayama, 2013). The OECD, the World Bank, and the EU have all supported CBE through this rationale and have created a list of "key competencies" that are considered to be key outcomes of education (Anderson-Levitt & Gardinier, 2021). For example, both OECD and UNESCO emphasize that competencies, such as collaboration, communication, and critical thinking and related dispositions enable a person to function effectively in their family as well as to become a productive member of their society (Delors, 1996; OECD, 2005). Recently, OECD (2019) suggested a framework for "transformative competencies," (p. 4) which are types of knowledge, skills, attitudes, and values that learners need to be an active participant in the process of transforming society, building a future for better lives, and thriving in different situations and experiences.

The idea that education should emphasize key competencies as students' outcomes was reinforced by the launch of the OECD Programme for International Student Assessment (PISA) in 1997. PISA assesses 15-year-old students in terms of "the content that students need to acquire, the processes that need to be performed, and the contexts in which knowledge and skills are applied" (Schleicher & Tamassia, 2000, p. 9). Over the years, OECD has continuously defined and selected key competencies and innovated PISA to measure a wide range of competencies, such as critical thinking, problem-solving and global competence (OECD, 2005). Since its launch, PISA has become a tool of global governance regarded as an objective and trustworthy source for policymakers to draw on for policy decisions relating to curricular goals. Through its PISA reports, OECD encourages countries to include competencies as learning goals for their education system (Anderson-Levitt & Gardinier, 2021; Takayama, 2013).

More specifically aligned with a human capital view of education, CBE is also driven by the rationale to develop competencies to meet the demands of the economy, which Tahirsylaj and Sundberg (2020) identify in their systematic literature review on CBE. This rationale is also used by the OECD and the World Bank to explain their interest in competencies (Anderson-Levitt &

Gardinier, 2021). For example, in presenting a framework about how individual competencies contribute to the attainment of individual and shared goals, "gain full employment and income" is the first indicator for success of individual and for success for society, it is "economic productivity" (OECD, 2015, p. 6). Similarly, in a report about youth and skills, UNESCO (2012) utilized an economic rationale to identify three types of skills young people should acquire, including foundational skills, transferable skills, and technical and vocational skills that can improve opportunities to get a good job or staying in gainful employment. The Sustainable Development Goals (SDGs) also include 21st-century skills and competencies to support sustainable economic development, lifelong learning and global citizenship.

CBE's proponents also believe that it is a good approach to teaching and learning for several reasons. According to Sullivan & Downey (2015), CBE provides flexibility and transparency for teaching and learning by setting standards and assessing students' demonstration of "authentic application of knowledge and skills" (p. 6). Specifically, Gervais (2016) asserts that in CBE, learning does not only occur in school but also in a community or online depending on students' choices, interests, and learning styles. CBE is designed so that learners can progress at their own pace and should only be assessed when they are ready to demonstrate a required level of mastery. During the learning process, students are supposed to receive customized support from teachers through formative assessment. Because flexibility is core to learning, assessment, in the best-case scenario, is based on how a individual learner performs and it measures students' progress along their academic process rather than course objectives. According to Gervais (2016), how teachers structure learning activities is key in CBE because they should no longer merely transfer knowledge to students but they have to carefully plan the course's objectives to make it in line with the broader curriculum, including developing instruction and deciding which activities and learning platform can best serve students' competency development. CBE, hence, requires students' self-regulation skills to take ownership of their learning and it requires teachers to collaborate to define competencies, align instruction and assessment and agree on the grading process across curriculum (Torres et al., 2015). With this emphasis on students' active role in the learning process, CBE is often associated with learner-center pedagogy (e.g., Chisholm & Leyendecker, 2008). As a result, CBE is promoted as an educational paradigm to shift education systems away from subject-centered curriculum and seat time and rote learning as indicative of learning (Sullivan & Downey, 2015; also see Moon, 2007; Ford, 2014; Torres et al., 2015).

Critics of CBE, however, claim that it is more a policy approach than an educational method because it is economically driven and neglects the cultural and social purpose of learning (Kerka, 1998; Moore,1996). Kerka (1998) asks a critical question about whether government, employers, or educational institutions determine competency-based curricula. She argues that while CBE advocates claim that the approach gives learners the autonomy to decide what to learn and how to learn, the outcomes or the competencies that students achieve are only what employers look for. In that sense, CBE is no longer an educational approach but an economic policy approach that aims to measure the success of CBE by skills achieved for the workforce. She points out that learning serves social and cultural purposes, and importantly, equips students with critical thinking about addressing social and political issues or structural inequality. However, being driven by an economic basis, CBE abandons these purposes and values and limits other stakeholders, such as educators or students, from deciding these purposes.

Tores et al. (2015) share the concerns about educational equity in CBE. Their research shows a high level of engagement of both teachers and students in the teaching and learning process under CBE. However, they assert that students need metacognition and self-regulation skills to be able to track their own progress as well as reflect on how they learn. Without attention to these skills, achievement gaps potentially increase between high-performing students who already possess these skills and are more likely to be successful in CBE and students from disadvantaged or low-performing academic backgrounds who need more time to progress through the curriculum. This also poses a question about whether struggling students receive adequate personalized support they need to master the required competencies. Recent studies on CBE echo this concern on the reproduction of inequality in CBE. In a study on the implementation of CBE in Russia, Aydarova (2021) found that education reformers appropriated the competency discourse to bifurcate the standards of the educational system such that students from elite backgrounds received in-depth academic knowledge, while those from less privileged groups learned competencies to be socialized as active and productive citizens, so as not to become delinquent members of society.

Finally, a key challenge of CBE is how assessment of students' competencies should be conducted. Kerka (1998) and Parker and Walters (2008) comment that there is a tendency to use a checklist approach to decide whether students achieve or can perform required competencies. As part of the discussion about the establishment of the National Qualification Framework for CBE in South Africa, Parker and Walters (2008) point out that CBE covers both competencies and academic standards. While the former represents indicators of skills or performance measures, the latter assesses knowledge of curricular content. Hence, these two elements cannot be assessed with similar measurement and grading methods. Adding to the challenge of students' assessment, Spady (1977) argues that frequent assessments in CBE—a crucial role in helping teachers personalize learning—requires the complex task of coordinating assessment results and organizing appropriate instructional activities for students based on these results. To reduce the complexity, educators may routinize these tasks in practice, and thus, reducing the flexibility that is inherent to CBE.

The literature on CBE shows that what competencies are and how competency-based learning, teaching, and assessment look like are still globally and locally debated. While some countries have rejected CBE (Anderson-Levitt & Gardinier, 2021), the approach is still pervasive in education policies and curricula in both the Global North and South as well as in educational discourse of international organizations.

Vietnam's Competency-based Curriculum Reforms

The goal to develop students' competencies can be traced back to the general education curriculum program in 2006 and other education policies since then. In the 2006 general curriculum program, the development of individual learners' competencies was one of the program's goals (Decision 16/2006/QĐ-BGDĐT). It also emphasized instructional practices that focus on practicing and connecting knowledge with real-life situations and pedagogies that "promote students' activeness, self-discipline, initiative and creativity, and foster students' self-study competency" (Ministry of Education and Training [MOET], 2006, p. 3). At this point, the program did not define 'competency' or specify any competency-related outcomes; instead, it

attempted to introduce active learning to an education system that had tried with the child-centered approach but continues to be viewed as practicing rote learning and lecturing (see Tanaka, 2020).

The incorporation of competencies into the curriculum became more evident through a pilot program called the Vietnam Escuela Nueva (VNEN), implemented from 2012 to 2016. The VNEN program, adapted from the Escuela Nueva program in Colombia and supported by the World Bank, included clear outcomes for competencies such as *cooperation, communication, creativity, leadership, and self-managed learning*. Stemming from social-constructivist ideas, the VNEN program also promoted new pedagogies to engage students through cooperative learning (Parandekar, et al., 2017). Although the program ended in 2016, many VNEN teachers continued to apply some VNEN pedagogical aspects to their teaching.

Around the same time, the Vietnamese Communist Party (CPV)'s Resolution 29 (2013) articulated a fundamental and comprehensive innovation in education. This reform program aimed at developing a national curriculum that "transit[ioned] from a knowledge-based education to an education that develops comprehensively students' qualities and competencies, harmonizes virtues, intelligence, body, and beauty, and brings out the best potential of each student" (CPV, p. 1). Based on this Party Resolution, MOET announced the 2018 general education program that explicitly seeks to shift the basic education system to CBE. While restating the purposes of education as noted above, the 2018 general education program also stated that a motivation is the lack of "high quality of human resources and competitiveness of the economy" and the desire to "improve the quality of human resources, equip future generations with a solid cultural foundation and high level of adaptability to all changes of nature and society" (MOET, 2018, p. 3).

The idea of competency development has officially entered the policy discourse, and Vietnamese policymakers and educators have invested in understanding and adapting CBE to the Vietnamese context. Over years of policy debate and implementation, there are now specific definitions, though these changed during the process of developing CBE to be implemented. For instance, competency in the new curriculum has a clear definition, which "allows a person to

mobilize an amalgam of knowledge, skills and other personal attributes such as interests, beliefs, and determination ... to successfully implement a specific activity and achieve the desired result in a specific condition (MOET, 2018, p. 37, as cited in our chapter book). The curriculum divides competencies into disciplinary competencies (language competency, calculation competency, and physical competency) and general competencies. There are three sets of general competencies: self-control/autonomy and self-learning, communication and collaboration, and creative thinking and problem solving (see Table 1). There is also a clear emphasis on developing students' ability to apply learned knowledge in real-life situations. In addition to competencies, the curriculum also specifies five qualities (patriotism, compassion, diligence, honesty, and responsibility). Together with competencies, these qualities are expected to help students "develop harmoniously social relationships," "develop rich personality" and "live a meaningful life" (MOET, 2018, p. 6).

The CBE curriculum has now been implemented since 2020 through new textbooks that focus on competencies and pedagogies for teaching them. Teachers received training on CBE before implementing the curriculum and continue to receive ongoing training on the new curriculum. In sum, Vietnam's new curriculum and its rationales for CBE align with international discourses while having locally relevant ideas and meanings.

Table 1. Three sets of general competencies and their sub-domains for lower secondary level

Sets of general competencies	Sub-domains
1. Self-regulation and self-	Autonomy
learning	Self-affirm and protect the legitimate rights and demands
	Self-regulate one's emotions, attitudes, behaviors
	Adapt to life
	Career-oriented
	Self-learning, and self-improvement
2. Communication and	Identify the purpose, content, method and attitude of
cooperation	communication
	Establish and develop social relationships; adjust and
	resolve conflicts
	Identify purposes and methods of cooperation
	Identify one's responsibility and actions
	Identify the needs and abilities of the cooperator
	Organize and persuade others
	Evaluate cooperation
	International integration
3. Problem-solving and creative	Realize new ideas
competencies	Identify and clarify the problem
	Develop new ideas
	Propose and select solutions
	Design and organize operations
	Independent thinking

(MOET, 2018, pp. 38-52) (translation our own)

Background to the Study and Research Methodology

This qualitative longitudinal classroom study was part of a larger mixed-method research project (supported by RISE) conducted with primary and secondary teachers and students between 2017 and 2021 in Vietnam. This research project aims to understand Vietnam's education performance, particularly when Vietnam has been implementing the 'Fundamental and Comprehensive' education reform since the 2010s.

Data collection

For the study, we used the methodology of video-cued reflection that drew on data collection methods used in the TIMSS (1999) video study (Stigler et al., 2000) as well as other qualitative studies of teaching (e.g., Tobin, 2019). We conducted interviews with 91 teachers prior to recording their teaching; we recorded several classroom lessons using two video-cameras, and then had discussions with teachers after they viewed their recordings. In the interview before the recording, teachers discussed their general teaching style, instructional methods, and how they approached a particular lesson to develop competencies for students. For the video recording, we used two cameras, one focused exclusively on the teacher and the whole classroom, the other on students, including groups of students. The videos captured detailed data of classroom interactions and discourses and showed the complex and interactive nature of teaching as a social-cultural practice (Alexander, 2001; Stigler et al., 2000). Two to three lessons (usually 45 minutes each) of each teacher were recorded over a few days during a week-long visit to the schools. While the recorded lessons did not occur throughout the school year, which limits our understanding of teachers' practices, we returned to the schools over three years to discuss and record their teaching practices. After their classes were recorded, the teachers participated in a post-lesson reflective interview in which they viewed their videos and reflected on what they had done — the why and how of their teaching practices. The combination of interviews with the video recordings allowed for teachers to reflect on and articulate their underlying beliefs about teaching and learning. Artifacts, such as photos of lesson plans and students' work, were also gathered from the classroom.

All interviews with teachers were organized in a private room where conversations were not

interrupted or overheard. Teachers were also assured that their video recordings would not be shared with others outside the research team. The team who did the data collection was a consistent team of three Vietnamese researchers who visited the school, though sometimes the same researcher visited the same schools each year, sometimes there was a new researcher.

Data Analysis

Data were gathered in 10 provinces across the northern, central and southern regions of Vietnam¹. Mathematics and Vietnamese (literature) teachers from 20 secondary schools, usually two schools per province, were selected to participate in this study. These schools and classrooms were selected because they also participated in the larger study that included quantitative surveys of teachers and students, and assessments of students in the classroom.

Qualitative data were first coded by a team of 12 coders in Transana–a qualitative data analysis program useful for combining and analyzing videos. For the first stage of analysis, the research team developed a codebook informed by the literature on classroom observations, teacher quality, and competency teaching and learning; these categories were also included in our interview questions (Hafen et al., 2015; Klette et al., 2018; Grossman, et al., 2014). For example, these categories included teachers' instructional practices; classroom management; teachers' understanding of competencies; teaching/assessing competencies; students' demonstration of competencies. The meaning and specificity of each category, e.g., teachers' teaching style or creativity competency, were discussed with the research team in a workshop each year to consider how the data informed or expanded each category. Thus, each code had specific meanings and examples from Vietnamese teachers and classrooms, including additional codes that were added or changed based on what emerged from the data. Coders used this emergently designed codebook to categorize large chunks of data, including transcripts of interviews and video recordings. We later transitioned our data to NVIVO to complete coding all sources of data. We engaged in multiple iterations of analysis of these coded data, depending on the research questions.

_

¹ These provinces are Cao Bang, Lai Chau, Thai Binh, Nghe An, Quang Tri, Quang Nam, Lam Dong, Binh Thuan, Tra Vinh, and Kien Giang.

For this paper, we specifically undertook a longitudinal analysis of teachers' data (Cobb & Whitenack, 1996; Neale, 2020; Saldaña, 2003) and loosely followed the framework of longitudinal analysis suggested by Vogl et al. (2018).

- (i) In the first round of analysis, we focused on a subset of data for eight teachers who participated in our study for three years (2017-2019). We inductively analyzed the pre- and post-lesson interview transcripts of year one (2017) and watched the related classroom videos. We did the same for the dataset of years two and three for these eight teachers. This step suggested provisional themes across the eight teachers with notes about differences between math teachers and literature teachers, and between teachers' sensemaking/understanding and practices/actions. Initial themes on this level may vary or overlap across the years, including things/competencies students need to learn/develop, competencies versus skills, competencies as teaching content knowledge, competencies as cultivating attitudes and moral values, approaches to teaching/assessing each competency, classroom techniques to develop competencies, competencies as life skills, non-verbal communication cues of teachers, etc.
- (ii) In the second round, we went through all themes and sub-themes cutting across the coded categories, and charted them out in a matrix for each wave of data collection. This step helped us make longitudinal comparisons, identifying potential themes of *changes* and *continuities* in teachers' sensemaking and practices of competencies across time points. An example of a 'change' theme over the years is a shift related to teachers' sensemaking of competencies from an emphasis on content knowledge and skills to the integration of 'life skills.'
- (iii) Based on the themes initially identified within the eight teachers, we continued to expand the longitudinal analysis to the larger dataset with a focus on teachers' pre- and post-interviews.² We continued to refine the themes, condensed categories while constantly comparing across cases (teachers), the subjects (literature and math) and against the first stage's coding for more solid evidence and salient thematic patterns (Charmaz, 2014). An important note is that for complex 'change' themes such as the example above, they were not only 'coded' and simply inferred through frequencies of codes—though word counts and frequencies did offer a preliminary

15

² While some teachers followed the study for two years, most of these teachers participated in our study for one year.

indication of change areas. Some themes actually became discernable after being adjusted and refined; whereas some others were removed or merged with other themes throughout the iterative cycles of (re)reading the transcripts, watching class videos, charting and visualizing ideas, and writing multiple memos (Charmaz, 2014; Miles et al., 2014; Vogl et al., 2018).

(iv) As for in-depth analysis of videos, we watched closely the videos of eight teachers to illustrate how literature and math teachers developed competencies changed, or not changed, over the years. Due to the working paper's limited space, we only included one case study of a literature teacher in this report, highlighting her trajectory of teaching communication over three years of participating in our study. The analysis of videos was informed by the sociocultural perspective (Cobb & Whitenack, 1996; Derry et al., 2020; Klette et al., 2018; Russ et al., 2016). It began with close watching the recordings (both teacher and student videos), reading the video transcripts, the interview transcripts of teachers and school principals, and reviewing related artifacts such as school reports, teacher lesson plans, and students' work of three years. We analyzed the videos by coding teacher-student interactions (using pre-set categories) and holistically considering the related sociocultural contexts of teaching and learning in Vietnam. Examples of such sociocultural conditions include implicit social rules for what can be uttered or done in the classroom setting, and mediating factors that might influence teachers' pedagogical design and practice. The analyses and memo writing were guided by questions such as: How does the teacher's sensemaking of communication inform her teaching practice? What teaching approach and strategies did this teacher use to help her students develop communication competency? How did the students respond to her teaching strategies? What aspects and types of communication did she focus on developing? How did she draw on artifacts in her teaching? In what ways does her teaching of communication change or stay the same over the years towards developing communication for life?

We endeavored to ensure the study's trustworthiness in different ways, including using multiple data sources for triangulation (Creswell, 2015; Miles et al., 2014). For example, we utilized repeat observations and several interviews with the teachers over the years, in addition to supplementary data such as schools' annual performance reports, teachers' lesson plans, and students' work. Further, all the coders were trained in qualitative analysis methods, and core

researchers contributed to the analysis of data and memo-writing. During the analysis, we also held regular discussions to review the coding schemes, compared themes/sub-themes and our memos, and ensured agreement with interpretations and cases for illustration.

While drawing on rich qualitative data from videos of teachers and students and video-cued reflective interviews, this study has several limitations. First, teachers would perform differently when being video recorded, and we certainly found that this occurred in our study at times. In a few cases where we felt the teacher over-prepared for the video recording, we sought triangulation to verify our understanding. For example, if they seemed to prepare for a lesson, we considered how they taught their lesson alongside what they said about what they planned to teach (in their first interview) and also their reflections on how they taught. In addition, given the nature of a qualitative study, the analysis does not aim to generalize to the broader population of teachers. Rather, this analysis aims to make conceptual generalizations about competencies with detailed insights of teachers' sensemaking and practices embedded in the naturalistic classroom setting.

Findings and Discussion

Overall, teachers made sociocultural connections to the current curriculum and their values to give meaning to and practice the target competencies. As a result, their sensemaking of competencies and competency development was built on the domains of *knowledge*, *skills* and *attitudes* requirements (KSA)³ in addition to the values system embedded in the current curriculum.

Teachers shared relatively consistent understandings of each competency despite minor shifts in meanings or foci across the years. Analysis of later-year interviews shows that most teachers would not always give a simple, straightforward distinction, yet some could contrast 'skill' from 'competency' clearly.⁴ As such, teachers would use 'skill' when referring to a foundational

_

³ the 'KSA requirements for outcome standards' that Vietnamese teachers have been familiar with for years in the current curriculum.

⁴ as this teacher clarified: "Skill means that you have a capacity in technical terms, whereas competency is when you apply that skill to real life or work situations, that means you are competent, for example, teaching competency, drawing competency [...] Competency is big, which needs to mobilize all of the [necessary] skills" (Giang, M-8)

academic skill (for example, logical thinking skill), which students need to learn and practice for a period of time, such as a particular class session or a semester. However, teachers gradually discussed the key competencies with more authority and a clearer emphasis on their process-orientation, integration, and socioculturally embeddedness. As such, a competency was made sense of as including a set of specific skills or a set of tasks, in addition to desirable behaviors, attitudes, or moral values' (see description of communication or problem-solving competencies below). Competency development was initially understood as the accumulation of related skills through task-oriented learning activities. Yet teachers' increasing attention to the integration of real-life application prompted teachers to practice competencies for life in a more definite manner. In this sense, teachers expected students to actively 'doing' the work, for example, through in-class practice, group work, and 'connecting with real-life situations' (*liên hệ thực tiễn*). However, this 'life skills' or 'experiential learning' as teachers referred to remain a discrete component in their current teaching practice, which continued to prioritize task-based, content-and product-oriented learning.

This section presents three major themes related to teachers' sensemaking of general competencies in terms of concept and teaching practices. The themes include (i) competency as learning foundational KSA, (ii) competency as cultivating attitude, character, and morality, (iii) competency as applying to real life. Some of the results have been presented in our earlier reports (e.g., Duong & DeJaeghere, 2022). Findings related to creative and critical thinking competencies are exclusively addressed in another paper and thus are not discussed here.

Competencies as foundational Knowledge-Skills-Attitudes

Teachers initially did not distinguish between domain-specific and general competencies. In the first years of the study, they would imply all types of competencies as skills and along the domains of *knowledge*, *skills* and *attitudes*.

_

⁵ Teachers invariably referred to as 'duties/tasks' or *nhiệm vụ* and expected students should get the tasks done when teachers assigned to them ('chuyển giao nhiệm vụ')

Competency as learning a set of academic skills and content knowledge

Teachers would give much attention to academic skills or subject-related competencies when discussing the questions 'What do you think students need to learn the most?' or 'What are the most important competencies (in the subjects you teach)?'. For math, the often-mentioned subject-related competencies include calculation, logical thinking, and mathematic reasoning, while for literature, these are abilities to use Vietnamese, communication, reading comprehension, and aesthetics (appreciation of beauty in and through language arts). There is a minor shift in later-year interviews (2018, 2019) as more teachers articulated general competencies important for students to learn and develop at schools, especially communication and collaboration, self-learning, and problem solving. Yet even when referring to these focal general competencies, acquiring domain-specific skills in addition to mastery of content knowledge were believed as the keystone for students to put into practice or apply to real life. Accordingly, teachers continued to focus on teaching content knowledge first, then let students develop domain-specific skills through practice. Teachers' approach to helping students practice or apply the learned KSA would involve two levels: (i) doing classroom practice and (ii) 'connecting with oneself' or with (imagined) real-life situations. Often, the second level of application—connecting with self and real life—was only implemented if time permitted and within the classroom setting. The paragraphs below illustrate teachers' sensemaking of competencies as a concept and as a practice based on such foundational KSA.

Communication. Teachers used the terms communication and collaboration interchangeably, in that when students worked together for a common task, communication was an essential component of collaboration. Throughout the years, they made sense of communication as a set of specific skills one should demonstrate, including 'using or leveraging (Vietnamese) language in responding to others,' 'presenting information,' 'discussing,' 'demonstrating oneself,' and 'convincing others with confidence.' Teachers would classify communication skills into receptive skills (listening and reading) and productive skills (speaking and writing). Literature teachers regarded communication competency as both a primary objective and a means for teaching and learning in the subject matter, in which students used communication to develop their vocabulary and improve the use of language (word choice, sentence types, and grammar)

in an appropriate manner. Meanwhile, communication competency was often a secondary objective in math classrooms and was intended to be developed in a sense to communicate subject-matter knowledge. As such, teachers in both subjects emphasized the importance of acquiring a good vocabulary (in Vietnamese), which is of more significance for ethnic minority students who do not use Vietnamese at home and their local communities.

Collaboration. Teacher participants understood this competency as 'teaming up,' 'working together for a task,' or 'contributing to the lesson.' Terminologically, teachers would use *hop tác* (collaborate) or *tập thể* (collective) with a sense of collaborating with peers, mostly within the classroom or school contexts, though several English versions of the new curriculum use the terms *cooperation* instead of collaboration. Although the developmental goals of each competency domain are stated for each educational level (primary, lower secondary and upper secondary), it is not clear if different levels of collaboration/cooperation are expected of in students of different grades of 6 through 9. Even so, none of the interviewed teachers, including those teaching grade 9—the senior grade of the secondary level, mentioned situations where collaboration takes on the meaning of international collaboration as described in the curriculum regarding *international integration*. ⁶

Most teachers aimed to foster communication and collaboration through *pair* or *group work* in which students could 'express themselves,' 'exchange ideas,' 'assist each other,' and 'find common ground.' Pair or group work was often organized as the practice/follow-up activities after students were taught the new concepts, and necessary skills and strategies. Assessment of communication and collaboration was done through teachers' observations of students' particular behaviors linked with lesson activities such as presenting ideas, responding to questions, and practicing individually or with friends. While teachers of both literature and math across the years mentioned pair or group work, more collaborative activities were observed in the literature classrooms, particularly in grades 7 and 8. Some teachers explained that they planned for such

.

⁶ Have a basic understanding of the relationship between Vietnam and some countries in the world and some international organizations with regular relations with Vietnam. Be actively involved in international integration activities that are relevant to oneself and the characteristics of the school and the locality. (MOET, 2018, p. x)

activities but 'did not have enough time' to conduct them. Similarly, teachers might ask students to give (oral) feedback on their friends' answers or presentations as a way of peer-assessment. Yet they would not spend much time on these activities, which they viewed as not directly benefiting students' formal assessments, particularly in grade 9. We will further explain this finding in the next section on self-learning.

Self-Learning. In the new curriculum, self-learning refers to the ability to individually complete assigned tasks at home, as well as independent thinking and applying learned concepts. Teacher participants in our study regarded self-learning as an important competency for students' development because it supports active, independent and life-long learning. In later years (2018, 2019), more teachers regarded self- and peer-assessment as an important element of self-learning for it offers students an opportunity to rethink or revise their knowledge and experience. Self-and peer-assessment is actually a pedagogical technique popularly applied in the VNEN curriculum to promote self-learning and independent thinking. As a teacher explained, she "borrowed self- and peer-assessment practice from her VNEN classes to apply in the conventional classes" because it helped students speak up their minds and evaluate what is right and wrong in their own thinking when comparing their exercise results with their peers' work (Oanh, L-9).

Many teachers fostered self-learning by assigning homework, which would be checked for scores at the beginning of each lesson. Students were asked to review learned concepts by answering questions in textbooks and also prepare for the new lessons. They were also encouraged to find additional information related to the lesson using relevant resources, for example, teachers, friends, and the Internet—though reference books and the use of the Internet for independent learning purposes are limited in many remote, rural areas in Vietnam. In the classroom, some teachers also tried to develop self-learning through individual activities. Individually-focused practice was used for students to complete certain exercises in textbooks by applying their prior knowledge and/or experience.

Analysis of later year data (2018, 2019) shows that teachers seemed to place more emphasis on self-learning, particularly through independent learning and thinking in senior-year students (grade 9). In one sense, they asked students to 'self explore or 'self research,' for example, by

taking ownership of and navigating their own learning. In this way, teachers saw themselves as 'facilitators' who guided and enabled students to construct their own knowledge. In another sense, teachers encouraged students to speak up their minds and initiate new ideas to become independent thinkers. Some teachers explained that they were aware of the fact that ninth-graders were 'growing up teenagers' who would need more autonomy and self-discipline in their studies. Another related important reason—albeit not always explicit in teachers' discussions—is that students in this transition grade (grade 9) needed to prepare for the graduation exam. Self-learning means a great deal of independent practice to prepare for mock and real tests. Grade 9 classrooms, therefore, would see less 'active' learning activities such as group work, presentations or games. As alluded to above, teachers could not implement these activities as planned because they needed to cover much content for these core 'main' subjects. This explanation equally shed light on why many teachers, while valuing the VNEN teaching approach, were unenthusiastic about engaging students in active learning to improve non-cognitive skills, areas that were rarely assessed in formal examinations.

Problem Solving. Analysis of three-year interviews consistently shows that teachers viewed problem-solving competency as a set of specific tasks that students do to 'find an answer' or a 'solution to a problem, question, or issue' that teachers raised. Thus, solving problems refers to specific learning tasks/exercises, such as math problems, and also situations that contain more complex problems, usually related to a real-world issue. Most teachers shared the opinion that problem-solving involved a set of tasks that included 'understanding in-depth an issue,' 'identifying the problem,' 'brainstorming ideas,' 'applying the learned knowledge,' and 'finding solution(s) to a given task.' If more than one solution was found, and particularly ones different from what teachers or the textbook presented, the process was referred to as *creative problem solving*.

Making sense of problem-solving as such, teachers discussed a set of tasks that can help students solve a 'problem' in the math classroom. With step-by-step tasks, teachers guided students through understanding the question and coming up with an answer to it. Similar to the self-learning competency, teachers over the years said that they followed common practice for

assessment of problem solving: evaluating students' problem-solving skills through exercises, homework and formal tests. Norman (1988) makes a distinction between problem solving, which requires intellectual challenges, and solving problems, which may only require the ability to memorize knowledge and apply appropriate knowledge to resolve a given problem. In this regard, finding an answer to a math problem or doing a great deal of classroom practice does not necessarily lead to enhanced problem-solving skills or competencies. Therefore, teachers' persistent emphasis on 'correct answers' resulted in the kind of learning and assessing primarily based on knowledge acquisition rather than skill-oriented and meaningful to life.

Competency as cultivating attitudes, character and moral values

Teachers also made sense of competencies within their values and ideologies. For many teachers, learning to have appropriate attitudes, character and moral values was believed to be crucial, though they were not always explicitly discussed in relation to the target competencies. The attitudes that teachers appreciated the most include seriousness ($nghi\hat{e}m\ tu\hat{e}c$), self-discipline (ture), activeness ($tich\ cure$) and cooperation ($hop\ tu\hat{e}c$). In addition, practicing such a right attitude together with life skills were seen as associated with moral cultivation. Many teachers in effect considered *character development* or moral cultivation a valuable aspect of schooling. The following teachers' quotes illustrate this point:

I wish to transmit sufficient knowledge to students and [help them] develop skills, not only lesson [academic] skills but also life skills. I am of the opinion that developing character among students is the most important thing. (Manh, M-9)

Literature not only helps students to master scientific [academic] content but also as a means for them to learn to become a [good] human, how to behave properly. (Linh, L-7)

The first thing is that students need to take charge of their learning and learn morality. If they have such [attitudes], they will perform better, meaning that they can understand the lesson better and stay more focused in study. Morality is not only good in learning math but in other subjects. It is critical for students to absorb knowledge and acquire behavior skills, which is good for them [in their life] later. (Quan, M-9)

As the quotes demonstrate, cultivating morals, attitudes and behaviors has a special place in schooling as teachers believed that developing good character was critical for students to learn well and lead a good life. Yet teaching social skills and moral values was more discernible in the literature class than in math class. Specifically, in discussing the communication and collaboration competencies, many literature teachers stressed the importance of 'good' communication, especially when students learned to express their perspectives in class. Teachers in VNEN style classrooms indicated that to practice communication, students must demonstrate an ability to articulate their viewpoints, listen and argue against, if necessary, along with being 'assertive,' 'confident,' and importantly, 'courteous.' These combinations of skills and attitudes illustrate both the individual actions and social relationships that they aim to develop as students' communication competencies.

Similarly, collaboration is related to communication in that it aims to develop social competencies. A few teachers viewed collaboration more broadly as contributing to a common goal and demonstrating cooperative behaviors. In this way, collaboration was not merely the activity students participated in, i.e., working in groups, but how they worked together and for what purposes. For example, teachers considered learning collaboration and communication as a way to promote mutual understanding, support and solidarity, especially in areas with diverse ethnic groups. These quotes exemplify how teachers associated collaboration and communication with nurturing such moral values.

I teach my students to be active in supporting their friends, and that they should know that classmates are [like] their family members. I teach them to be supportive and caring of each other as a way of enhancing solidarity. In group work, they need to collaborate and assist other team members, especially friends who have weaker abilities and feel inferior to others. And also, they should alternate leadership so that everyone has a chance to speak up her or his mind. (Vinh, M-7)

Many highland students like Hmong or Mang (ethnic minorities) tend not to mingle well with lowlanders like Thai and Kinh. Their shyness prevented them from communicating and collaborating with other groups of students, particularly in solving problems in their studies. We

came up with a solution to help them better integrate with each other. We get them to sit at a shared table where they can discuss learning issues and solve the tasks collaboratively. (Quynh, M-9)

Both literature and math teachers also discussed diligence, responsibility, and self-discipline as important character qualities for students to cultivate to become a 'good person' or 'good citizen.' For example, having a 'strong sense of self-discipline and activeness' was perceived as an attitude underpinning the development of self-leaning and for life-long learning. While selfdiscipline was interpreted as opening up opportunities for students' independent and life-long learning, some teachers associated discipline with achieving desired behaviors, for example, being obedient or dutiful, which conform to particular rules, such as class or school regulations, and by extension, the laws or social norms.

In addition, other qualities, including patriotism, compassion, and love for the nature, were found deeply embedded in teachers' approaches to teaching language and literature across the years. This subject is believed to culminate with teaching moral and ideological values, which are also more or less fastened to other social sciences subjects (i.e., history, civic education). The following excerpt from an observed literature classroom demonstrates how the teacher intermingled teaching communication skills with promoting patriotism by connecting with students' learning and everyday life.

Teacher (to the whole class):... So ong Hai's love for his village (the main character in the story that the class were learning about) is also his love for the country, right? What about you, as students at school, do you love your country?

Students: Yes!

T: Patriotism is not abstract, isn't it? You're a patriot, aren't you? Of which country? So what do you do to express that patriotism to your country? (point to a student)

Student 1: the expression of patriotism is to do well at school to make the country better.

T: Thank you. What else? (to another student)

S2: I would do the same, studying hard at school like my friend.

S3: I would do social activities.

T: Please give us some examples.

S3: Collecting garbage, like picking litter in the community's open-air markets.

T: Great! Thank you. What about you [point to another student].

S4: I love Vietnamese people, and I love Vietnamese culture.

Teacher (to the whole class): Thanks to you all. You love Vietnam, its people, the traditions, and the country, right? You all love your school, your family, your village, everything familiar around you. So you strive to study hard to serve the country in the future, which is also an expression of patriotism [...] Each of you may have different expressions, but this is the way you connect patriotism with yourself and everyday life. And I hope you will continue to do what you tell me today. (Tuyet, L-9)

This finding is consistent with the broader trend in Vietnam's schools where teachers integrate subjects, or relevant elements of other subjects, in the subjects they are teaching for the goal of 'whole-child development.' A deeper explanation can be traced to the cultural influence of Confucianism, in countries like China and Vietnam, on the national curriculum with a focus on moral and values teaching including socialist values (Deng and Zhengmei, 2021; Nguyen and Nguyen, 2014; Nguyen, 2016). In this respect, the finding echoes the literature on other East Asian countries with the Confucian Heritage Culture, which reports that their curricula often emphasize moral and values education (e.g., Lee et al., 2004). In Vietnam's new CBE curriculum, the learning outcomes pertaining to values and character virtues are articulated explicitly, including the five character qualities of patriotism, compassion, diligence, honesty and responsibility. The cultivation of these qualities is considered to accentuate Vietnamese people's typical characteristics. Although they have been long anchored in social sciences subjects' curriculum, the reason for separating these domains from the competencies in the new CBE curriculum may be to facilitate the overt teaching and assessment of the target qualities.

Competency as applying to life

When discussing competencies, teachers also made sociocultural connections to the current curriculum to understand and practice the target competencies. Teachers across our dataset mentioned 'life skills' as part of the current 2006 curriculum requirement, but more teachers of higher grades (8 and 9) stressed the importance of real-life application and connected life skills

⁷ Our current study did not ask teachers detailed questions concerning these targeted qualities.

learning with competency development in an explicit manner. For instance, some strongly emphasized life skills because it "represents one's character or the way a person behaves or responds properly in real life, which is the key thing she/he learns from school and never forget" (Hue, L-9).

Definitions of life skills varied across teacher participants, but generally, it was juxtaposed with 'lesson's skills' or 'academic skills' (kỹ năng bài học). Life skills that teachers included in the syllabus ranged from 'any skills beyond the classrooms', 'connecting with oneself (students' life and study),' 'lesson learnt/take-away,' 'relating with real life,' to 'drawing on/connecting with local or indigenous knowledge.' Such inclusion of life skills, alongside character education, was to ensure the meaningful communication of academic knowledge and skills, which many teachers perceived as serving the broader purpose of Vietnam's education that seeks to 'develop the whole-child or well-rounded person.' These excerpts illustrate teachers' views of life skills and how they taught and assessed this set of skills:

Excerpt 1. Interviewer: What competencies you can develop in your teaching?

Tuyet: educating life skills, that is, the skills of communicating (content knowledge) to the outside world.

I: What else?

Tuyet: the skills of speaking their minds, their emotions in a particular situation, or their perceptions of their own feelings or concerns towards their loved or the surrounding environment. It is also learning about morality, or the way of becoming a decent person and behaving appropriately with others. (Tuyet, L-7)

Excerpt 2. I: How can you develop life skills for students?

Yen: It depends on the lesson. For instance, if this lesson has a section about describing the nature, I connect it with life skills such as how to protect the environment, the forests in danger, or relate it with issues such as climate change, or weather forecasting, from which students learn the skills and attitudes towards contemporary life.

I: So, how do you see students' progress in life skills?

Yen: Usually [through our observations of] their behaviors in everyday life, in their daily interactions, we can know and then teach more [about life skills]. When they eat a cookie, for

example, what do they do with the cookie's container or plastic bag? I often encourage them not to use plastic bottles but use glass ones for reuse. You observed in my 9/1 classroom, didn't you, most of them used glass drinking bottles...And in the test beginning of the new school year, I also incorporated a question about solutions to reducing plastic waste in school. Then, you know, students' attitude and behavior toward keeping the (school) environment clean improved clearly. (Yen, L-9)

As the analysis above revealed, teachers in the study's first years focused more on developing specific skills for the competencies around concrete lesson tasks or classroom activities. In the later years, more teachers realized the importance of incorporating authentic, real-world situations in the classroom by teaching competencies for life. Both math and literature teachers provided examples where they put students in real-life situations to apply the learned knowledge and put forward practical solutions. Specifically, students in math classrooms were asked to identify items around them that have the shapes of square, rhombus, etc. Teachers also had them "measure a tree and a ship" (Lan, M-8) or figure out "how to paint their own house with a reasonable amount of paint" by applying math concepts to real situations students might confront (Minh, M-9). Interestingly, some teachers used the term 'real-life application competency,' referring to 'life skills' as melding with the particular competency (skill) they were discussing.

In brief, the integration of life skills as knowledge application rings true and parallels with what has long been stressed in Vietnam's traditional learning, i.e., 'studying goes along with practice.' Life skills integration is also consistent with the VNEN principle of 'application to everyday life' and was facilitated by the process in which teachers in many schools had piloted the VNEN curriculum, or 'borrowed' some components of it. Accordingly, the transition to the CBE curriculum appeared to make sense to teachers as they learned that real-life application was valued, or at least logically connected with what they had been undertaking related to life skills. Explanations of some teachers below reflect such an understanding:

_

⁸ In Vietnamese, some sayings or proverbs express this idea, for example, học đi đôi với hành; tri hành hợp nhất

⁹ VNEN main principles: Participative and collaborative learning; Self-paced learning guides; Student government; Formative assessments; Application of learning to everyday life, with community integration; Teacher professional networks

I personally don't see anything absolutely new here. If competency development is incorporating life skills or something like Ho Chi Minh thoughts or national security [in our teaching], I don't know other subjects, but as for literature, I always do this integration. Even before [the new idea of] integrated teaching, I had been doing this. For example, when teaching the lesson about the poem "Visiting Ho Chi Minh Mausoleum," I sang the song for the class. It means that I already integrated music in my literature lesson, didn't I? (Van, L-8)

[Competency development] is thought of as something new, but I think that teachers have been doing this for years. We didn't label it as "competency," but we taught [and continue to teach] "lesson skills" and "life skills," we still merge them together to help students develop wideranging aspects (skills). But we did not name specific competencies like what we do today [...] So, I see the similarity between teaching life skills and competencies in that both necessitate real-world application. Take the communication competency and life skills for example, both require students to accumulate knowledge in class and then apply it to everyday situations in life. It means that after they acquire the necessary language and skills, they apply these skills together with their own experience to real life in an appropriate manner. (Men, L-9)

Along this line, for many teachers, the ambiguity and elusiveness of 'competency' of the past years seemed to be settled by a practical solution: adding the competency column next to the descriptions of knowledge, skills, and attitudes in their new CBE lesson plan. Teachers were gradually inclined to an understanding that competency involves a combination of elements that they have been teaching and assessing for years—knowledge, skills and attitudes (KSA), plus an explicit emphasis on application that is meaningful to life. In this sensemaking process of competency, teachers experienced levels of ambivalence and puzzlement as they tried to give meaning to competencies, then connect their abstract interpretations with concrete action through practical acts within their teaching context (see Weick et al., 2005). As such, the idea of life skills was now rethought and linked to competency teaching in that teachers sought to include more social-cultural connections to their current curriculum, and, importantly, encourage more student reflection and expression of their minds in the learning process. We will demonstrate evidence of such teaching practice in the following case study.

A case study: Learning literature to develop communication

Ms. Thi has taught literature in a school located in a low socio-economic, hilly Northern area of Vietnam for around six years. For her, communication, or "the ability to use language," often coupled with collaboration skills, is a key competency that secondary-level students need to develop. Other target competencies include problem solving, self-learning (grade 7), selflearning, collaboration, observation, problem solving (grade 8), problem solving, critical thinking, and "real-life application competency" (grade 9). When asked in the interviews, she was not always articulate in her explanation of the competencies, particularly when it came to questions about teaching and assessing competencies such as observation, problem solving or critical thinking. She said that she only attended the CBE training once and did not find it much beneficial as expected. With regard to communication, she made sense of it as the skill of "using language precisely and effectively," in addition to proper behavior in interacting with others (pre-interview, L-7). In grade 8, she expressed that communication was the "ability to use language, as a means in both written and spoken forms, to express and exchange one's ideas" (pre-interview, L-8). Her understanding of communication in grade 9 is similar but with a more apparent emphasis on real-life application. In addition, she wanted her students, many of whom¹⁰ were "shy ethnic minority students," to learn to express their ideas more fluently, using varied vocabulary and with more confidence.

In all three years, Ms. Thi expressed that she aimed to impart values, affection and strong morals. Consistent with this goal, she incorporated the cultivation of both an effective communicator and a "genuine [decent] human" in her teaching (pre-, post-interviews). For her, knowledge is foundational and essential, yet (life) skills and a good attitude or character are more important. Among these, skills to communicate ideas and live cooperatively should be nurtured and developed, particularly in the literature classroom, through beautiful literary works and with teachers' guidance. Nevertheless, as we will show later, her strategies to assist students in learning communication evolved across the years.

10

¹⁰ approx. 90% per classroom

Ms. Thi's overall lesson procedures remain consistent over the years: (i) students learned to understand in-depth the new knowledge, often through a literary text to learn about its content and language arts. In this stage, students needed to read and analyze the text thoroughly, alongside listening to the teacher's commentaries/discussions of the text; (ii) students practiced communication skills by doing exercises and responding to teachers' questions; and (iii) students applied to life by reflecting on their study or families using the learned knowledge and skills.

Longitudinal analysis of class observations shows that she tried to modify learning activities to promote students' active participation and application to real life, which is most evident in grade 8's lessons. Specifically in grade 7, Ms. Thi mostly provided literary commentary with predominant teacher talking time with little effort to check students' alternative opinions or draw on their real-life experiences. Moving to grades 8 and 9, Ms. Thi slightly changed her teaching method, corresponding with her greater emphasis on developing students' competencies for life (post-interviews). Her instruction in these years became deepened towards competency development in at least two ways. First, she integrated well-designed tasks including more class discussions. With the teacher's guidance and support, working in pairs and groups helped the students express themselves and exchange their thoughts with peers in a safe space. As a result, students looked more confident and comfortable when being called upon to present their ideas.

Second, it is evident in the later years that Ms. Thi was more flexible in using teaching strategies to encourage students to express themselves and speak up their minds. For example, she responded better to individual students and called upon both able and weaker students. She provided a set of questions ranging from easy to complex rather than questions-only-to-check the information. If a student had a wrong answer, the teacher would ask probing questions with suggested terms for her to think further and express herself better. She also gave students, raising hands or not, opportunities to give feedback on other students' opinions. This teaching was intended to "wake up the students' potential" by encouraging more problem solving, reflection and higher-order thinking (pre-lesson interview, L-8). As such, student videos show that students

_

¹¹ Although she did spend some last minutes of class time singing beautifully a traditional song about new year's celebration of Tay-Nung, the ethnic groups that are most populated in their area.

appeared engaged in expressing their ideas and speaking up their minds, particularly in 2019 when they were allowed to invite other friends to respond to a question or a task critically.

Notably, in 2018, she used 'mindful imagination' to foster students' imagination and emotions. In particular, in a class practice for role play, students were asked to close their eyes for some minutes and imagine being *chi Dau*, the main character of the literary work they were studying. Then they learned to act out the scene when *chi Dau* experienced the most hardship time in her life-having an ailing husband, losing a little son, and trying to resist heavy colonial tax (by begging the tax collector). While the class context was limited in terms of time and space for practice, this activity helped students learn to communicate sorrow, anger, despair and helplessness with the newly acquired vocabularies and body language. The literary work was set up in the colonial context; still, the teacher believed that these emotions were indispensable in anyone's life, from which students also learned about empathy and compassion. In other words, through deep listening and role-play practice (the scene of chi Dau resisting the ruthless tax collector), Ms. Thi helped students learn to communicate in their daily life by expressing their ideas and feelings in a difficult situation, and especially to sympathize with the underprivileged. Although the teacher did not discuss further in her post-lesson reflection, the syllabus of this grade indicates that the lesson also aimed to help students feel strongly against colonial oppression, and by extension, denounce inequalities in society. It is not evidenced though, in most observed literature classrooms including Ms. Thi's, that teacher participants made any connection between their competency development with contemporary efforts against social vices or injustices.

In brief, this case study exemplifies how teachers like Ms. Thi made sense of competencies by drawing on their pre-existing belief systems and practices—frames of reference that are deeply embedded in the sociocultural context of the local teaching context and communities (Coburn, 2001). Such frames of reference act as a prism through which global and national ideas enter and become recontextualized (Burn & Menter, 2021; Coburn, 2001; Spillane et al., 2002). At the same time, this case demonstrates changing practices related to competency development as

teachers sought to accommodate the larger community's discourses around what good quality teaching and learning is.

Implications

The current study's findings suggest many implications, and we will focus on several implications for curriculum/textbook developers, teachers, teacher trainers, and education leaders. First, evidence in this study indicates that moving towards CBE approaches in Vietnam requires more real-life application in all stages of teaching and learning. In other words, competency development needs to be process-oriented and socioculturally embedded throughout the learning processes. Our study reveals that whereas teachers' understandings were shifting toward competency development for life, classroom practice demonstrated much less evidence of such real-life application. This limitation is clearer for self-learning, creativity, and problem solving, where teachers' practices tended toward developing subject-specific skills and knowledge. This understanding-action gap is largely because teachers continued to use the current curriculum, in which mastering knowledge and academic skills was viewed as the primary indication of learning success. Meanwhile, life skills-if offered as a course-would be taught as a stand-alone subject, often decoupling from core academic subjects. 'Real-life application' thus primarily took place within the classroom setting and revolved around risk-free topics concerning students' studies, families, or environmental protection. Given teachers' sensemaking and teaching drew on their existing practices, competency development during this time continued to be limited to teaching and learning knowledge and skills in an almost decontextualized manner.

If competency development is to be the central focus of the curriculum, competency teaching and learning should be part of all aspects of school life and meaningfully connected with students' life and experiences. Specifically, teaching competencies should not be an add-on to the curriculum, for example, through life skills courses or experiential learning activities that are disconnected from academic subjects (Egodawatte, 2014; Hong, 2012). Instead, developing competencies for life should be infused across the curriculum with teaching approaches based on authentic, real-life situations that make learning personally relevant and engaging. Accordingly,

textbook writers should operationalize innovative pedagogical approaches in concrete, meaningful learning activities and assessment tasks. These teaching approaches, already introduced in the new curriculum, include *integrative teaching, differentiated instruction*, and *experiential learning*. Textbook writers should thus develop detailed, consistent guidance and diverse resources for learning activities and assessments so that teachers can implement the CBE curriculum with clear learning standards. In the long-term, if done systematically, competency assessment will help monitor individual students' progress and move them through proficiency levels as they achieve competency in a given area of learning. With this perspective, competency development should be designed and enacted in ways that do not aim for high scores but for the development of one's genuine potential and competence.

Given the challenges of competency teaching and assessment, particularly during the early state of CBE implementation (see Bingham et al., 2021), how are teachers supported beyond the training that they have received? This important question has rarely been raised and discussed in Vietnam's current CBE reform. For many stakeholders in education, the most significant and perhaps ultimate support for in-service teachers is training. This presumption is not invalid in terms of revamping knowledge and teaching skills for the immediate term. But given the existing approaches to training (one-off/short-term, top-down, cascade training), which arguably have a limited long-term effect on teacher learning (e.g., Le et al., 2019), training without on-going reinforcement and support would unlikely engage teachers in CBE practices. A sociocultural approach to teacher learning which gives attention to the development of teacher professional identities is necessary to effectively support teachers' agency and ownership in their own teaching contexts (Burn & Menter, 2021; Lerman, 2001; Russ et al., 2016).

While we agree that teachers are no doubt frontline workers in any education, it is also true that 'it takes a village to raise a child.' This is particularly true in a complicated sensemaking process where teachers need to go through an identity shift to truly engage in CBE (Bingham, 2021). Therefore, in addition to reducing teachers' administrative burdens, school leaders and mid-tiers should provide teachers with more agency and systemic support. Mlambo et al. (2021)

¹² an African proverb

suggest that school leaders are most effective in transforming the education workforce when they "provide instructional leadership to teachers, create a culture of shared responsibility through establishing professional learning communities among teachers, and leverage the broader community" (p. 1). Their suggestion aligns with Education Commission's (2019) proposal regarding forms of support communities, where classroom teachers can collaborate with and get assistance from multiple partners. These partners include school-based fellow teachers, teacher candidates, support staff, as well as educators, non-academic professionals and community experts.

Conclusion

In brief, this study was set out to examine teachers' sensemaking and pedagogical practices in relation to competencies in CBE curriculum reform in Vietnam between 2015 and 2020. This study shows how teachers made sense of competency as a conceptually complex construct and as a pedagogical practice in the context of their social and cultural experiences. Teachers connected competencies to their personal experience knowledge, interpreting a competency as including a set of specific skills or tasks, knowledge, desirable behaviors, attitudes and values. In another sense, teachers had more awareness of competency development as a way to extend the teaching of 'life skills' which they had been implementing in the current curriculum. As such, teachers' sensemaking of competencies connects them with attributes relevant to the purpose of learning in Vietnamese society—of developing the rounded person who possesses knowledge, skills, and moral values not only necessary for future careers but also for citizenship. Despite the shifting mindsets of teachers, some of whom have already transformed their practices to teach competencies for life, teaching competencies remains a very challenging task. This study suggests that (re)contextualizing meanings and changing cultural practice like developing competencies for life is never a linear, straightforward process, and neither is it achieved via oneoff training. Adapting to innovative pedagogy should be built on contextually relevant practice and values, as well as take into account teachers' experiences and their complex trajectories of learning. Therefore, we need on-going and concerted efforts from the whole community to accompany teachers in scaling up the new CBE model to the system level.

References

- Alexander, R. J. (2001). *Culture and Pedagogy: International Comparisons in Primary Education* (1st edition). Wiley-Blackwell.
- Anderson-Levitt, K. (2017). Global flows of competence-based approaches in primary and secondary education. *Cahiers de la recherche sur l'éducation et les savoirs*, (16), 47-72.
- Anderson-Levitt, K., & Gardinier, M. P. (2021). Introduction contextualising global flows of competency-based education: Polysemy, hybridity and silences. *Comparative Education*, 57(1), 1–18. https://doi.org/10.1080/03050068.2020.1852719
- Appadurai, A. (1996). *Modernity at large: Cultural dimensions of globalization* (Vol. 1). U of Minnesota Press.
- Aydarova, E. (2021). Knowledge for the elites, competencies for the masses: political theatre of educational reforms in the Russian Federation. *Comparative Education*, *57*(1), 51-66.
- Bengtsson, S., Kamanda, M., Ailwood, J., & Barakat, B. (2020). Teachers are more than 'supply': Toward meaningful measurement of pedagogy and teachers in SDG 4. In *Grading Goal Four* (pp. 214–237). Brill Sense.
- Bingham, A., Adams, M., & Stewart, R. L. (2021). Competency-Based Education: Examining Educators' Experiences. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2021.4383
- Brown, M. (1994). An introduction to the discourse on competency-based training (CBT) in Deakin University Course Development Centre (Ed.), *A collection of readings related to competency-based training (pp. 1-17)*. Victoria, Australia: Victorian Education Foundation, Deakin University.
- Burn, K., & Menter, I. (2021). Making Sense of Teacher Education in a Globalizing World: The Distinctive Contribution of a Sociocultural Approach. *Comparative Education Review*, 65(4), 770–789.
- Care, E., Vista, A., & Kim, H. (2019). Assessment of Transversal Competencies: Current Tools in the Asian Region. *UNESCO Bangkok*.
- Charmaz, K. (2014). Constructing grounded theory. SAGE.
- Clandinin, D. J. (1992). Creating spaces for teachers' voices. *The Journal of Educational Thought (JET)/Revue de La Pensée Educative*, 59–61.
- Cobb, P., & Whitenack, J. W. (1996). A method for conducting longitudinal analyses of classroom videorecordings and transcripts. *Educational Studies in Mathematics*, 30(3), 213–228. https://doi.org/10.1007/BF00304566

- Coburn, C. E. (2001). Collective sensemaking about reading: How teachers mediate reading policy in their professional communities. *Educational Evaluation and Policy Analysis*, 23(2), 145–170.
- Creswell, J. W. (2015). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (Fifth edition). Pearson.
- CPV (Communist Party of Vietnam) (2013). Resolution No. 29-NQ/TW on "Fundamental and Comprehensive Innovation in Education, Serving Industrialization and Modernization in a Socialist-Oriented Market Economy During International Integration" Ratified in the 8th Session [Nghị Quyết về "Đổi mới căn bản, toàn diện giáo dục và đào tạo, đáp ứng yêu cầu công nghiệp hóa, hiện đại hóa trong điều kiện kinh tế thị trường theo định hướng Xã Hội Chủ nghĩa và hội nhập quốc tế" đã được hội nghị Trung Ương 8 Khóa XI thông qua].
- Delors, J. (1996). The Treasure Within (The Delors report on education). UNESCO: Paris.
- Derry, S. J., Pea, R. D., Barron, B., Engle, R. A., Erickson, F., Goldman, R., Hall, R., Koschmann, T., Lemke, J. L., Sherin, M. G., & Sherin, B. L. (2010). Conducting Video Research in the Learning Sciences: Guidance on Selection, Analysis, Technology, and Ethics. *Journal of the Learning Sciences*, *19*(1), 3–53. https://doi.org/10.1080/10508400903452884
- Duong, B.-H., & DeJaeghere, J. (2022). From Student-Centered to Competency-Based Reform: Exploring Teachers' Perspective of Meaningful Participation. Research on Improving Systems of Education (RISE). https://riseprogramme.org/publications/student-centered-competency-based-reform-exploring-teachers-perspective-meaningful
- Education Commission. (2019). *Transforming the education workforce: Learning teams for a learning generation*. https://educationcommission. org/wp-content/uploads/2019/09/Transfor ming-the-Education-Workforce-Full-Report. pdf
- Egodawatte, G. (2014). An analysis of the competency-based secondary mathematics curriculum in Sri Lanka. *Educational Research for Policy and Practice*, *13*(1), 45–63. https://doi.org/10.1007/s10671-013-9145-5
- Ford, K. (2014). Competency-based education: History, opportunities, and challenges. *UMUC Center for Innovation in Learning and Student Success*, 10, 24.
- Gervais, J. (2016). The operational definition of competency-based education. *The Journal of Competency-Based Education*, 1(2), 98-106.
- Grossman, P., Loeb, S., Cohen, J., & Wyckoff, J. (2013). Measure for measure: The relationship between measures of instructional practice in middle school English language arts and teachers' value-added scores. *American Journal of Education*, 119(3), 445-470.

- Hong, W.-P. (2012). An international study of the changing nature and role of school curricula: From transmitting content knowledge to developing students' key competencies. *Asia Pacific Education Review*, *13*(1), 27–37. https://doi.org/10.1007/s12564-011-9171-z
- Klette, K., Bell, C. A., Dobbelaer, M., & Visscher, A. (2018). Qualities of classroom observation systems. *School Effectiveness and School Improvement*, *30*(1), 3–29.
- Komatsu, H., Rappleye, J., & Silova, I. (2021). Student-Centered Learning and Sustainability: Solution or Problem? *Comparative Education Review*, 000–000. https://doi.org/10.1086/711829
- Le, V. C., Nguyen, H. T. M., Nguyen Thi Thuy, M., & Barnard, R. (Eds.). (2019). *Building Teacher Capacity in English Language Teaching in Vietnam: Research, Policy and Practice* (1st ed.). Routledge. https://doi.org/10.4324/9780429457371
- Lee, W. O., Grossman, D. L., Kennedy, K. J., & Fairbrother, G. P. (Eds.). (2004). *Citizenship Education in Asia and the Pacific: Concepts and Issues*. Comparative Education Research Centre.
- Lerman, S. (2001). A review of research perspectives on mathematics teacher education. *Making Sense of Mathematics Teacher Education*, 33–52.
- Lwin, H. N. (2019). *Teachers' sensemaking in curriculum policy enactment in Myanmar* [Thesis, Monash University]. https://doi.org/10.26180/5cc18f5b7182a
- Meyer, H.-D., & Benavot, A. (2013). PISA, power, and policy: The emergence of global educational governance. Symposium.
- Mayer Report (October. 1992) Putting General Education to Work: The Key Competencies Report. AEC, Melbourne.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (Third edition). SAGE Publications, Inc.
- Ministry of Education and Training, Vietnam (MOET). 2018. "The National Curriculum for General Education [Chương Trình GDPT Tổng Thể]." MOET. https://se.ctu.edu.vn/images/upload/vanban/CTGDPT-tong-the.pdf.
- Ministry of Education and Training, Vietnam (MOET). 2006. Decision 16/2006/QĐ-BGDĐT on "The promulgation of the general education program [Quyết định Ban hành Chương trình Giáo dục Phổ Thông]." MOET.
- Mlambo, Y., Nielsen, A., Silova, I., Wolfenden, F., Rafaeli, T., & Jones, C. (2019). *Redesigning the Education Workforce: A Design Thinking Approach*. 37.
- Moon, Yl. Education reform and competency-based education. *Asia Pacific Educ. Rev.* 8, 337–341 (2007). https://doi.org/10.1007/BF03029267

- Muñiz, R. (2020). Muddy Sensemaking: Making Sense of Socio-Emotional Skills amidst a Vague Policy Context. *Education Policy Analysis Archives*, 28(114), n114.
- Neale, B. (2020). *Qualitative Longitudinal Research: Research Methods*. Bloomsbury Publishing.
- Nguyen Thi Nhu Quynh. (2016). The Vietnamese values system: A blend of oriental, Western and socialist values. *International Education Studies*, *9*(12), 32. https://doi.org/10.5539/ies.v9n12p32
- Nguyen, V. H., Vu Bich Hien Nguyen, Thi Mai Huong Vu, Thi Kim Hue Hoang, & Thi Minh Nguyet Nguyen. (2020). Vietnamese Education System and Teacher Training: Focusing on Science Education. *Asia-Pacific Science Education*, *6*(1), 179–206. ProQuest Central; SciTech Premium Collection. https://doi.org/10.1163/23641177-BJA10001
- Nordin, A., & Sundberg, D. (2020). Transnational competence frameworks and national curriculum-making: the case of Sweden. *Comparative Education*, 1-16.
- Norman, G. R. (1988). Problem-solving skills, solving problems and problem-based learning. *Medical Education*, 22(4), 279–286. https://doi.org/10.1111/j.1365-2923.1988.tb00754.x
- OECD. (2005). *The definition and selection of key competencies: Executive summary*. Paris: OECD. Retrieved from http://www.oecd.org/pisa/35070367.pdf
- OECD. (2019). OECD future of education and skills 2030 conceptual learning framework concept note: student agency for 2030, [Online], available at:

 https://www.oecd.org/education/2030-project/teaching-and-learning/transformative-competencies_for_2030_concept_note.pdf
- Parker, B., & Walters, S. (2008). Competency based training and national qualifications frameworks: Insights from South Africa. *Asia Pacific Education Review*, *9*(1), 70-79.
- Parandekar, Suhas D.; Yamauchi, Futoshi; Ragatz, Andrew B.; Sedmik, Elisabeth K.; Sawamoto, Akiko. 2017. *Enhancing School Quality in Vietnam through Participative and Collaborative Learning*. World Bank, Washington, DC. © World Bank.
- Russ, R. S., Sherin, B. L., & Sherin, M. G. (2016). What constitutes teacher learning. *Handbook of Research on Teaching*, 391–438.
- Saldaña, J. (2003). Longitudinal qualitative research: Analyzing change through time. AltaMira Press.
- Schleicher, A., & Tamassia, C. (2000). Measuring Student Knowledge and Skills: The PISA 2000 Assessment of Reading, Mathematical and Scientific Literacy. Education and Skills.
- Schweisfurth, M. (2011). Learner-centred education in developing country contexts: From solution to problem? *International Journal of Educational Development*, 8.

- Spady, W. G. (1977). Competency based education: A bandwagon in search of a definition. *Educational researcher*, *6*(1), 9-14.
- Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387–431.
- Stigler, J. W., Gallimore, R., & Hiebert, J. (2000). Using video surveys to compare classrooms and teaching across cultures: Examples and lessons from the TIMSS video studies. *Educational Psychologist*, 35(2), 87–100.
- Sullivan, S., & Downey, J. (2015). Shifting Educational Paradigms: From Traditional to Competency-Based Education for Diverse Learners. *American Secondary Education*, 43(3), 4-19. Retrieved February 18, 2021, from http://www.jstor.org.ezp3.lib.umn.edu/stable/43694215
- Tahirsylaj, A., & Sundberg, D. (2020). The unfinished business of defining competences for 21st century curricula—A systematic research review. *Curriculum Perspectives*, 40(2), 131–145. https://doi.org/10.1007/s41297-020-00112-6
- Tanaka, Yoshitaka. 2020. Cải cách giáo dục Việt Nam: Liệu có thực hiện được "Lấy học sinh làm trung tâm"? [Education reform in Vietnam: Can learner-centered pedagogy work?]. Translated by Quoc Vuong Nguyen. Hanoi, Vietnam: NXB Phụ Nữ.
- Takayama, K. (2013). OECD's 'Key competencies' and the new challenges of educational inequality. *Journal of curriculum studies*, 45(1), 67-80.
- Tobin, J. (2019). The origins of the video-cued multivocal ethnographic method. *Anthropology & Education Quarterly*, 50(3), 255–269.
- Torres, A. S., Brett, J., & Cox, J. (2015). Competency-Based Learning: Definitions, Policies, and Implementation. *Regional Educational Laboratory Northeast & Islands*.
- UNESCO, (2012). EFA Global Monitoring Report 2012. Youth and skills: Putting education to work. Paris: UNESCO.
- UNESCO. (2016a). Measures of quality through classroom observation for the Sustainable Development Goals: Lessons from low-and-middle-income countries—UNESCO Digital Library. https://unesdoc.unesco.org/ark:/48223/pf0000245841
- UNESCO. (2016b). School and teaching practices for twenty-first century challenges: Lessons from the Asia-Pacific region, regional synthesis report. https://unesdoc.unesco.org/ark:/48223/pf0000244022
- Vogl, S., Zartler, U., Schmidt, E.-M., & Rieder, I. (2018). Developing an analytical framework for multiple perspective, qualitative longitudinal interviews (MPQLI). *International*

Journal of Social Research Methodology, *21*(2), 177–190. https://doi.org/10.1080/13645579.2017.1345149

Weick, K. E. (1995). Sensemaking in organizations (Vol. 3). Sage.

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4), 409–421.