The Use of Phenomenography in Understanding the Complex Notion of Competence

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Abstract: To explain the theoretical, philosophical underpins of phenomenography and the application of phenomenographic study in exploring the conceptions of competence among Chinese novice university English teachers. Phenomenography originated in Sweden as a qualitative research approach. It aims at understanding the qualitatively different ways in which people experience, perceive, and conceptualize various phenomena. It differs from other qualitative research methods in that it focuses not on the phenomenon itself or on the individuals, but on the variation in individuals' conceptions of the phenomenon. The ontological foundation of phenomenography rests on the belief that there is only one world, which is simultaneously objective and subjective, as it is always experienced and interpreted by individuals. There is no such world that exists independently of human experience. Phenomenographic research explores the various ways in which people experience, understand, and conceptualize a particular phenomenon. It takes a second-order perspective, which focuses not on the phenomenon itself (first-order), but on how it is perceived and experienced by individuals. Reality is always mediated through human awareness. Besides, phenomenography also generates categories of description based on collective meanings, capturing the essential variations in how different individuals understand the same phenomenon. The outcome space is the structured set of categories of description that represent the qualitatively different ways people experience or understand a phenomenon. A combined framework for a phenomenographic research on conceptions of competence among Chinese novice university English teachers is illustrated by describing the stages of a phenomenographic research. By taking a second-order perspective and including more varied viewpoints, phenomenography helps represent many points of views visually and also get insights of the relationship between those views. Understanding how novice university English teachers in China experience competence in class teaching will greatly give voice to this previously overlooked group and add to the body of knowledge about competence.

1. Introduction

Novice university English teachers in China are typically young graduates with a Master's or

Doctoral degree and less than three years of teaching experience. With the expansion of higher education, their numbers have increased, yet they often lack formal pedagogical training and rely on their own learning experiences to define competence [1]. Competence is context-specific and shaped by both ability and motivation, encompassing behaviours that support effective classroom teaching [2]. Despite their central teaching roles, few qualitative studies examine how these teachers conceptualize competence in China. Qualitative research allows deep insights into participants' lived experiences, and phenomenography, as a discovery-oriented method, is well-suited to exploring variations in such conceptions [3]. This study adopts phenomenography to investigate novice university English teachers' varied understandings of competence in the Chinese higher education context.

2. Phenomenography

Phenomenography explores the qualitatively different ways people experience phenomena, leading to structured "categories of description" and an "outcome space" [4]. Phenomenography is a research approach focused on mapping and describing the limited, qualitatively distinct ways a group of individuals experiences a phenomenon but not describing things as they appear. Phenomenography is also: the empirical study of the limited number of qualitatively different ways in which various phenomena, and aspects of, the world around us are experienced, conceptualized, understood, perceived, and apprehended. [5, p.4424]

According to Marton [5], the above definition highlights several key assumptions within phenomenography. Marton and Booth [4] state that phenomenography should be used if the researcher seeks to capture and articulate people's subjective experiences, such as learners or teachers, concerning various aspects of the world, particularly in educational contexts. A phenomenographic study aims to uncover the diverse ways a group of people experience, interpret, understand, perceive, apprehend, or conceptualize a particular phenomenon or aspect of reality. This is achieved by exploring and representing these experiences from the viewpoints of the individuals within the group [6]. It must be noted that these words, such as experience, interpret, understand, perceive, apprehend, or conceptualize are used interchangeably in phenomenographic literature [5]. As phenomenography continued to gain traction as a research approach, it began to develop a more robust theoretical foundation.

2.1 Theoretical Foundations of Phenomenography

Rather than being theoretically driven, phenomenography emerged as a research approach rooted in a strong empirical foundation. The theoretical foundations and philosophical assumptions of this research method remained largely unexplored until the late 1990s [4]. A fundamental aspect of this approach is its epistemological grounding in intentionality, which embraces a non-dualistic view of human cognition. Phenomenography rejects the dualistic notion of a separate, objective reality "out there" and a subjective, mental world "in here" [4]. This experienced world is not solely constructed by the learner, nor is it entirely imposed upon them from the outside. Rather, it is constituted through the internal relationship between the individual and the world [7]. According to Uljen [8, p.114]:

If we look at the ontological assumptions in phenomenographic argumentation, we cannot arrive at any other conclusion than the one presented, namely that the only reality there is, is the one that is experienced. The essence of reality lies in the whole range of individual experience. The 'truth' about for example a horse, is the sum of the observations of the horse-book writer, the jockey, the gambler, the farmer, the teenage girl, the veterinary.

Phenomenography adopts a non-dualistic, second-order perspective, focusing on how individuals

experience reality and the structural relationships in their conceptions [9]. While both phenomenography and phenomenology focus on human experience, their approaches differ significantly. Phenomenology, as a philosophy, often begins with a first-person perspective, exploring the researcher's own experiences [4]. While phenomenography examines the experiences of others, making it an empirical method. Besides, phenomenography emphasizes the differences in how individuals understand the world [10]. It's about mapping the variety of ways people perceive and experience a given phenomenon, rather than seeking a single, unifying essence [11].

Marton and Booth succinctly describe the differences as such [4, p.159]:

The phenomenologist wishes to describe the person's lifeworld, the world in which he or she is immersed and which the phenomenological methods bring to light. Whereas the phenomenologist might ask, 'How does the person experience her world?', the phenomenographer would ask something more like, 'What are the critical aspects of ways of experiencing the world that make people able to handle it in more or less efficient ways?'

Marton [12] outlines four key distinctions between phenomenography and phenomenology:

● Perspective: Phenomenology typically adopts a first-order perspective, directly examining the phenomenon itself. Phenomenography, however, takes a second-order perspective, focusing on how people experience the phenomenon.

● Focus: Phenomenology seeks the 'essence' of a phenomenon, including its shared, inter-subjective meaning. Phenomenography, conversely, explores the variety of ways people experience a phenomenon. It recognizes that understanding can be qualitatively different and aims to categorize these different perspectives.

● Orientation: Phenomenology is a philosophical approach that can inform methodology. Phenomenography is substance-oriented, directly investigating the ways people understand a specific phenomenon. A "phenomenography of X" describes how X is experienced, while a "phenomenology of X" represents the researcher's understanding of X derived through phenomenological investigation.

● Level of Consciousness: Phenomenology often explores the pre-reflective level of consciousness, examining experience prior to learned interpretations. Phenomenography encompasses both conceptual and experiential levels of understanding, including culturally learned and individually developed perspectives. It acknowledges the influence of learning and personal development on how we experience the world.

2.2 Knowledge as Experience: A Non-dualistic Interpretation

Ontologically, phenomenography rejects the dualistic notion of a separate, objective reality "out there" and a subjective, mental world "in here" [4, p.13]. Instead, it adopts a non-dualistic stance, which posits that there is only one world, which is explained by Marton and Booth [4, p.13]: the world is not constructed by the learner, nor is it imposed upon her; it is constituted as an internal relation between them. There is only one world, but it is a world that we experience, a world in which we live, a world that is ours.

Phenomenography views understanding as a dynamic, relational process between individuals and their world, focusing on subjective ways of experiencing phenomena [13].

2.3 Second-order Perspective

Phenomenography adopts a second-order, relational perspective, focusing on how individuals experience the world rather than on objective reality [4]. It values participants' reflective descriptions over researcher interpretation, highlighting subjective meaning-making [13]. Researchers bracket personal assumptions to access others' lived experiences [12].

2.4 From Individual Perspectives to Collective Meaning

Phenomenography analyzes collective variation, not individual views, by comparing interview data to identify shared ways of experiencing phenomena [7]. Phenomenography posits that diverse experiences arise because human experience is inherently partial. This partiality leads to a limited number of qualitatively different ways of experiencing something, based on "which aspects are discerned and held in awareness simultaneously" [4, p.122]. This implies a part-whole structure to understanding. Different ways of understanding a concept are interconnected parts of a larger, composite understanding, with each part contributing to and deriving meaning from the others. As is explained by Marton and Booth [4, p.124]:

The variation is, of course, distributed across the group, but to some extent even one single way of experiencing something is distributed. Its different appearances can often have complementary relationships with each other, like having fragments of the same whole spread around, the meaning of one bit derived from the meaning of and lending meaning to the rest.

Therefore, the significance of an individual's statement about a phenomenon is understood only in relation to what others say. In phenomenographic analysis, researchers create a 'pool of meaning' by extracting relevant excerpts from interview transcripts that relate to the phenomenon being studied [14]. This pool consists of meaning units, which are fragments of text that express an experience of the phenomenon, and serves as the starting point for further analysis [9]. A crucial point is that while excerpts are de-contextualised from the original interview flow, researchers must maintain awareness of the original context to avoid misinterpretations [5]. Researchers have flexibility in how they track the connection between excerpts and their original context within the transcripts.

This idea is well illustrated by the well-known parable of the blind men and the elephant, in which each man touches a different part of the elephant, such as the trunk, leg, or tail, and thus forms a different conception of what the creature is. Each account is valid within its own perspective, yet incomplete when considered in isolation. Similarly, phenomenography assumes that people's experience is always partial. Researchers try to describe realities from the collective consciousness of the phenomenon.

The collective consciousness of a phenomenon, in a phenomenographic sense, is revealed through the variations in how it is experienced [4]. The different ways people understand and perceive a phenomenon collectively contribute to a richer, more comprehensive understanding of its meaning and significance. The next part will describe the theoretical and analytical frameworks for understanding conceptions, which are closely related to experience and awareness.

3. Phenomenographic Analytical Framework

In phenomenography, conceptions—understood as ways of thinking, seeing, or experiencing—are central to analyzing how individuals make sense of phenomena [4]. Awareness is seen as selective and stratified, shaping varied experiences [15]. Analytic frameworks such as the 'what/how' and 'referential/structural' aspects help examine these conceptions [16].

3.1 The What/ How Framework

The 'what' and 'how' framework, introduced by Pramling [17] in her study on children's conceptions of learning, has become a key tool in phenomenographic research. This framework helps researchers categorize and analyze individuals' experiences and understanding of various phenomena, particularly in the context of learning. In Pramling's study, the 'what' aspect refers to the content of learning, or what children believed they were learning. This could include acquiring

skills, gaining knowledge, or developing understanding. The 'how' aspect, on the other hand, deals with the process of learning, or how children thought learning occurred. This could involve active engagement, observation, or cognitive processes. Pramling [17] suggested that any combination of the 'what' and 'how' aspects could occur, meaning that the content of learning could be paired with any process of learning. This idea was further developed by Marton [4], who extended the framework and provided more detailed definitions of the 'what' and 'how' aspects.

According to Marton [4], the 'what' aspect of a conception has a direct object, which refers to the content to be learned. The 'how' aspect is composed of an act and an indirect object. The act pertains to the manner in which learning is carried out, while the indirect object refers to the specific capabilities or skills the learner aims to develop through the learning process. Marton and Pong [15] argued that the what/how framework could be applied to conceptions of any phenomenonnot just learning. In this context, the 'what' aspect represents the person's understanding of the phenomenon's meaning, while the 'how' aspect represents their conceptualization of the acts that facilitate this meaning.

The 'what' and 'how' framework distinguishes between the meaning assigned to a phenomenon and the actions that construct it [4]. In McKenzie's study, the direct object (what) refers to the focus of teaching, while the act and indirect object (how) reflect strategies and required skills. This framework, grounded in intentionality, helps researchers interpret how individuals experience phenomena by analyzing both their focus and actions [8]. Marton and Pong [15] emphasize the dynamic interplay between these aspects, which shapes every way of experiencing a phenomenon.

3.2 The Referential/ Structural Framework

Marton [5] asserts that any phenomenon can be experienced in a limited number of qualitatively different ways. Awareness is layered—individuals focus on core aspects while others remain peripheral, shaping their understanding [4]. Gurwitsch's [18] model—theme, thematic field, and margin—forms the basis of this framework, emphasizing selective attention in structuring experience. These variations explain why people perceive the same phenomenon differently. Phenomenography thus focuses on identifying these structured differences to better understand how meaning is constructed through awareness and experience.

Marton and Booth [4] explain layered awareness through a reading example: the text is the theme, book details form the thematic field, and the environment is the margin [18]. When experiencing a phenomenon, focal and background aspects shift, reflecting the referential (meaning) and structural (part-whole) dimensions of conception [5]. The internal horizon comprises interrelated elements in awareness, knowledge, pedagogy, classroom management, shaping teachers'conceptions of competence [19]. The external horizon contextualizes these elements, representing the broader environment that influences understanding [20].

3.3 The Complex Framework for Understanding Conceptions

In phenomenographic studies, conceptions are typically analyzed according to two intertwined dimensions. The what/how and the referential/structural frameworks [4]. Each conception comprises two essential components. The what component, denoting what is experienced, and the how component, indicating how the experience takes place. These components simultaneously contain both referential (meaning-oriented) and structural (contextual) aspects, creating a rich, dialectically intertwined understanding of participants' experiences [4]. Marton and Booth [4] advanced an integrative framework that bridges these dual dimensions, synthesizing their interplay into a cohesive analytical lens. This model, which aligns with phenomenography's emphasis on capturing experiential variation.

The what/how framework facilitates a deeper examination of the meaning behind participants' conceptions, emphasizing the distinction between what is experienced and how it is experienced. The complementary referential/structural framework further deepens understanding by revealing the internal structure of conceptions through identifying their internal and external horizons of awareness. As Marton and Booth [4] state, meaning inherently implies structure, and structure inherently presupposes meaning, underscoring the interconnected nature of these frameworks.

The advantage of this combined analytical approach is that it encourages the researcher to carefully disentangle complex, multifaceted experiences. It offers a practical way to "think apart" the intertwined meanings, purposes, processes, contexts, and motivations underlying a given phenomenon [21]. However, it is critical to rigorously explain and systematically apply this framework to maximize clarity, transparency, and methodological rigor. Consequently, adopting a combined analytical framework, integrating both the what/how and referential/structural dimensions,is particularly adapted to suit this research.

3.4 The Framework Used in This Study

In this research examining the qualitatively different ways novice university English teachers experience competence, the application of this combined analytical framework was specifically adapted to clarify the complexities involved in these teachers' experiences, as is shown in Figure 1. More explicitly, this study investigates competence through both the what and how dimensions.
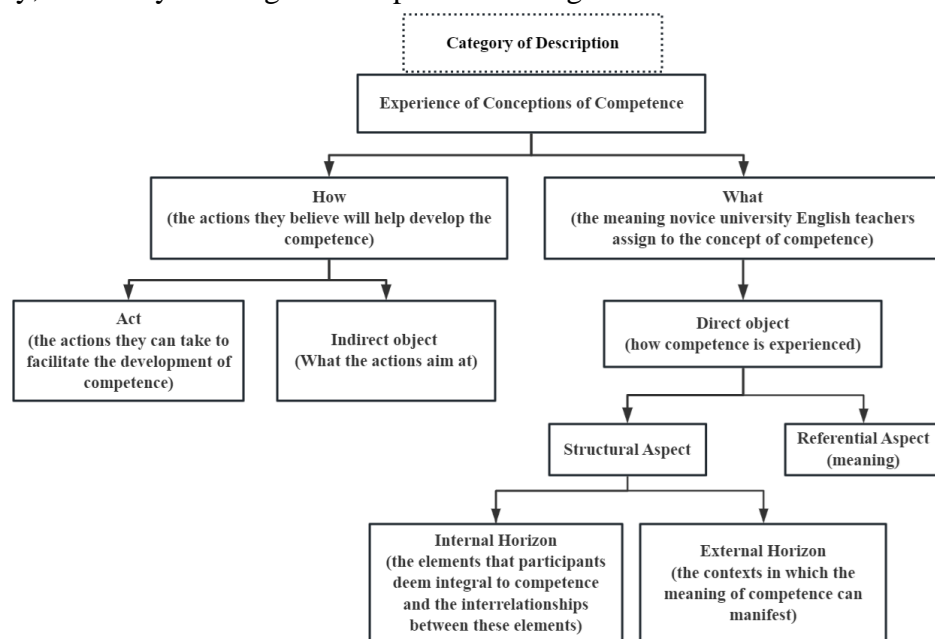

Figure 1: The Analytical Framework Developed for Describing Variations of Conceptions of Competence

This study draws on Pramling's [17] "what" and "how" framework, where the "what" refers to the meaning of competence and the "how" to actions that develop it. To deepen analysis, McKenzie's [22] structure of direct object (competence), act (teacher-facilitated actions), and indirect object (competence required to support students) is incorporated. Additionally, the referential and structural framework from Marton and Booth [4] is adopted, with Cope's [19] conceptualization of the external horizon. The referential aspect captures how participants make sense of competence, while the structural aspect includes the internal horizon (core elements and their relationships) and the external horizon (influential contextual factors such as institutional

policy). This combined analytical approach offers a nuanced interpretation of novice university English teachers' conceptions of competence in context, revealing both what competence means and how it is developed in practice. The following section introduces the phenomenographic method used to support this framework.

3.5 Categories of Description and the Outcome Space

Phenomenography presents findings through categories of description and an outcome space, which map qualitatively different, hierarchically related ways of experiencing a phenomenon [9]. In the phenomenographic outcome space, the structural relationships are hierarchically inclusive, some categories being more advanced and complex than others [23]. Åkerlind [24, p.1304] describes the hierarchical inclusiveness:

In other words, an understanding of learning as 'coming to understand something' (Category 3) includes awareness of the possibility of 'coming to know something' (Category 2) and 'being able to do something' (Category 1) as a part of learning, but not vice versa. In this sense, the ordering of categories is also an ordering of complexity, or sophistication of understanding of the phenomenon, and indicates the way in which human awareness of any phenomenon collectively unfolds or expands.

Marton and Booth [4, pp. 125–126] outline three key criteria for judging the quality of phenomenographic outcome space: (1) Each category of description in the outcome space should say something distinct about a certain way of understanding the phenomena. (2) Categories should have a logical relationship, which is often hierarchical. That is, there should be a series of increasingly complex subsets of the totality of diverse ways of experiencing various phenomena. (3) The outcome space should include as few categories as possible to capture the critical variations in the data. That is, the outcome space has to be 'parsimonious'. The distinct ways of presenting phenomenographic research findings are intrinsically linked to the methods of data collection and analysis, which will be explained in the next part.

4. Doing a Phenomenographic Research

Having established the rationale for employing a phenomenographic approach, the following section delineates the steps of doing a phenomenographic research. The overarching research questions are: 1.What are the lived experiences of novice university English teachers in China regarding competence as they teach the English language in universities? 2.How are the qualitatively different ways novice university English teachers in China describe competence found in this study related?

Permission of doing this phenomenographic research has been granted by the Taylor's University Human Ethic Committee. Using purposive sampling, 17 participants were selected to ensure conceptual variation and analytical depth [5]. Data reached theoretical saturation by the 14th interview, affirming adequacy for phenomenographic analysis.

Interviews, especially semi-structured ones, are central to phenomenography for eliciting reflective, authentic experiences [7]. Open-ended questions, bracketing, and empathetic engagement reduce bias and language constraints [13].

Phenomenographic analysis is an iterative, interpretive process requiring openness to emergent meanings. This study adopted Dahlgren and Fallsberg's [25] seven-step model: familiarization, compilation, condensation, preliminary grouping, category comparison, naming, and contrastive comparison. These steps supported the discovery of novice university English teachers' conceptions of competence.

The categories of description shows the qualitatively different ways how people perceive the

phenomenon under investigation. When those categories are presented in a structured way, it shows the relationship between those understandings and is called the outcome space [26].

5. Quality and Rigor in Phenomenographic Research

Ensuring quality and rigour was integral to this phenomenographic research due to its inherently interpretative and subjective nature [19]. To ensure quality and rigour, this study addressed validity, reliability, generalisability, and trustworthiness. Validity was enhanced through purposive sampling and transparent presentation of categories [24]. Reliability focused on interpretive consistency via detailed analysis and collaborative validation [12]. While phenomenographic findings are not generalisable in the statistical sense, rich contextual details supported transferability. Trustworthiness was achieved through credible procedures, audit trails, and reflexive practices that ensured findings reflected participants' varied experiences [27].

6. Rationale of Using Phenomenography in This Research

Critics argue that traditional competence studies overlook practitioners' lived experiences. Phenomenography addresses this gap by capturing diverse, context-specific understandings of competence. It enables exploration of how teachers interpret and enact competence in practice, supporting professional growth. Studies in education and healthcare [28] show phenomenography's value in informing policy, curriculum design, and teacher development. This interpretive approach highlights competence as dynamic, relational, and shaped by experience.

However, the use of phenomenography to better understand the conceptions of competence of novice university English teachers in China appears almost non-existent. Yet, such a study can enhance understanding of how these teachers view competence. Besides, according to Tight [29], phenomenography is "an innovative research design within higher education research" (p. 13) and its popularity owes to that:

Phenomenography is closely associated with an interest in higher education practice, particularly the student learning experience, and in seeking to improve this: for example, through the encouragement of deep, rather than surface, learning, and the employment of variations in teaching approaches. Most of those involved in higher education, and especially in higher education research, would acknowledge the importance of this. Any research design, methodology or theory which yields, or promises to yield, practically useful findings in this area will be welcomed.

Having established the rationale for employing a phenomenographic approach, the following section will delineate the conceptual framework guiding this research. By clearly outlining the key concepts, theories, and assumptions that underpin the research, the conceptual framework provides a foundation for the study, ensuring that the investigation remains focused and coherent throughout the various stages of the research process.

7. Conclusion

This paper introduces phenomenography as a less known qualitative research approach and the use of it in investigating the conceptions of competence among Chines novice university English teachers. This empirical research approach shifts from emphasis on individual experiences to a broader focus on collective understandings. By taking a second-order perspective and including more varied viewpoints, phenomenography helps us represent many points of views visually and also get insights of the relationship between those views. Understanding how novice university English teachers in China experience competence in class teaching will greatly give voice to this previously overlooked group and add to the body of knowledge about competence.

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