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A Cross-Cultural Exploration of Perceived Teacher Expertise: Insights from Chinese Higher Education

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ABSTRACT

This review synthesizes recent scholarship (2022–2025) on perceived teacher expertise with a focus on Chinese higher education as a cross-cultural case. We definitionally represent expertise as a configuration of practices either incorporating the disciplinary knowledge (PCK/TPACK), enacted capabilities (adaptive expertise, teacher noticing), and socio-moral identity (fairness, care, professional integrity). We differentiate between the perceived and the actual expertise and demonstrate that the judgments of stakeholders, which are frequently represented by student judgments, reflect the affective and cultural cues, as much as the instructional quality, and require triangulated evidence. Using the heritage culture of Confucianism, we describe how moral authority and relational harmony are kept at the forefront of identifying expertise in China and we combine it with the global standards of dialogic-based teaching and feedback-striking teaching that involves the use of technology. We consider such methodological innovations as task-based tests, discipline-normed observation, and measurement cross-group invariance psychometric level that can be used to make plausible comparisons across groups. Other aspects that we examine include the context of policy such as the Double First-Class initiative, which presents occasions and stressors of identifying and funding expert teaching. The outline includes at its end a synthesizing cultural cognitive framework and an accessible policy, research, international collaboration strategy: match incentives to learning-based evidence portfolios; construct culturally responsive tools, with moral-relational measures on, and tie enactment classroom studies to organizational changes. A combination of the review will reinvent teacher expertise as a culturally mediated, evidence-based ability to transform disciplinary knowledge into consequential learning.

1. Introduction

Mastery by teachers has been considered one of the most influential variables affecting student outcomes in learning, institutional growth as well as the general development of the education. In the context of the sphere of higher education, teacher-expert perception is not only instrumental in relation to student motivation and engagement but also influences the life of the institution, the trust of the academic community and the validity of passing on knowledge. As such, although it has been widely acknowledged that it is an important idea, the conceptualization of teacher expertise is quite complicated, disputed, and strongly rooted in the sociocultural circumstances [1, 2]. Perceived teacher expertise is not limited to technical competence or knowledge in the subject it includes inter-

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personal skill, moral character, reflective practice and the capacity to evoke intellectual and intellectual curiosity. In turn, the degree of teacher expertise as a construction and perception is also an important aspect that needs to be comprehended in different cultural contexts to promote the development of theory and practice in the global higher learning sector [1, 3].

Cross-cultural studies of education carried out in the recent decades have highlighted the importance of the situational sensitivity during the investigation of pedagogical constructs. Educational beliefs and values do not emerge everywhere; they are both socially and historically conditioned based on long held cultural assumptions of teaching, authority and learning. In western societies, teacher quality is commonly linked with professional autonomy, innovativeness, learner centered pedagogy wherein the expert teacher is a facilitator of critical inquiry and critical thinking. Conversely, in Confucian-legacy cultures, including China, expertise is often viewed in terms of moral authority, scholarly rigor and virtue development. The teachers are not only seen as imparters of knowledge solely but also seen as ethical leaders who represent social unity and intellectual rigor. Such cultural orientations influence the views of students and their workmates on what should be regarded as expertise and, as a result, have varied expectations and evaluation criteria [4, 5].

The Chinese higher education is specifically a very good source to study the cultural dynamics of perception of teacher expertise. The Chinese system of higher education has radically changed over the last forty years, opening new access and diversifying mission, and internationalization via such measures as the Double First-Class plan. These reforms have brought in new academic excellence measures and a pressure on tension between research production, and teaching. The image of teacher expertise has taken the center stage in institutional performance and individual achievement as universities become more determined to increase their competitiveness in the global arena. This process, however, has not been a value-neutral one; it is a continuing negotiation process between the classical Confucian concepts of the good teacher, and the current world paradigms based on innovation, interdisciplinary, and student-centered learning. The analysis of the intersection of these two forces in the determination of perceptions of teacher competence in China provides imperative information on the changing role of the university teacher in the globalized world [6, 7].

Empirical research on perceived teacher expertise in China reveals several themes are recurrent with some of these themes being that of moral aspect of teaching, the role of relation harmony and the respect of academic authority that has continued to be a perpetual phenomenon in China. There is a tendency of students to associate expertise with commitments, continual work and attentiveness, whilst institutional discourses are based on quantifiable results and pedagogic effectiveness. This and a wider epistemological conflict between collectivist values and western based systems of performance-based evaluation can be seen in this divergence. The fact that these paradigms coexisted forms a hybrid model of expertise which is both moral and instrumental at the same time, relational and technical. This hybridity led to the inapplicability of Western-based frameworks, as well as demands a culturally context-based interpretation that accepts the pluralism of educational values [8, 9].

Theoretically, views of teacher expertise have developed an initial perspective of cognitive models that applied a focus on procedural and declarative knowledge to a more comprehensive approach that involves social cognition, affect and professional identity. However, such models have been developed, to a large extent, in Western epistemic patterns, and might not be sufficient to reflect the socio-relational and moral contexts that define teacher expertise in non-western contexts. It can therefore be seen that cross-cultural inquiry is critical in re-evaluating the concept of universality of the existing theories. Placing teacher expertise in the cultural context of its functioning, the researchers will be in a better position to understand how the demands and requirements of the society, structural culture, and interpersonal relationships may impact or contribute to understanding professionalism and performance [10].

In addition, the process of globalization and internationalization of higher education has been increasing the necessity of intercultural knowledge of pedagogical skills. Universities in China are hiring more foreign faculty, developing transnational alliances, teaching evaluation systems that are modelled after western universities. The developments change the landscape of understanding the recognition and values of teacher expertise across the cultural boundary. An example is the western-trained faculty in the Chinese universities, who are likely to have conflicting expectations on teacher student relationships, classroom power and assessment practices. Likewise, philosophies of Chinese teachers within the international setting tend to bargain over conflicting definitions of the concept of being an expert teacher. These exchanges offer productive areas within which the activities of negotiating, adapting, and exchanging cultural scripts of teaching expertise are produced to meet the demands of global education exchange [11].

The aim of the review is to synthesize and critically

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review the extant literature on the concept of perceived teacher expertise with a cross-cultural perspective in the specific context of findings that have arisen in the area of Chinese higher education. Through its theoretical, empirical, and contextual views, it aims at enlightening the manner in which teacher expertise is conceptualized, quantified, and appreciated in cultural settings, as well as the ways such perceptions impact on educational practices and policy [12]. Through this, the review will provide to the increasing excellence of culturally responsive higher education and internationalization of teaching. It highlights the importance of shifting towards the process of homogenizing models of teacher professionalism into more inclusive models that can take into account cultural particularity and yet provide mutual understanding. Finally, considering the perceived teacher expertise within the Chinese education system does not only provide a lens into modernization processes in Chinese education, but also provides a wider picture upon the globalization of the concept of what it means to be an expert within the learning environment of the twenty-first century classroom of the university [13-15].

2. Conceptualizing Teacher Expertise

2.1 Definitions and Core Components

The teacher expertise has changed to be perceived as a fixed stock of professional knowledge towards a dynamic and flexible capacity which incorporates cognition, pedagogy, ethics and professional identity. The concept of expertise as an automatized procedural and declarative knowledge in the early cognitive theories developed, but recent studies view it as a socially situated and context-dependent phenomenon. The concept of teacher expertise has now become heterogeneous in the highest education considering the combination of content knowledge, pedagogical content knowledge (PCK), reflection practice, and moral commitment [16].

In the recent systematic reviews, it is pointed out that successful teaching in the university requires a way that the knower is not only given the capacity to deliver the disciplinary content, but also has the capability of delivering it in forms that are accessible to the different learners-a characteristic attribute of PCK. Moreover, digital competence, emotional intelligence, and cultural sensitivity have become key aspects of expertise in higher education at the global level. Adaptive expertise theories, as well as other theories, emphasize the fact that expert teachers can use knowledge in new situations flexibly and not according to routine. The teacher expertise therefore includes the ability to make judgments, reflective and responsive deeds in complex teaching settings [17].

This multidimensionality (which, however, applies to all areas of education) is also professional identity, including values, motivations, and ethical behaviors of teachers toward students and knowledge. The identity-based research demonstrates that the perception of teachers in terms of their moral and intellectual roles has a significant impact on the way students and peers view their professional knowledge. Therefore, teacher expertise is a social construct that has both individual and socially constructed recognition influenced by circumstances, culture and institutionalized expectations [18]. **Figure 1** illustrates the multidimensional nature of teacher expertise, emphasizing how cognitive, enacted, and ethical components interact to form a holistic view of expertise.

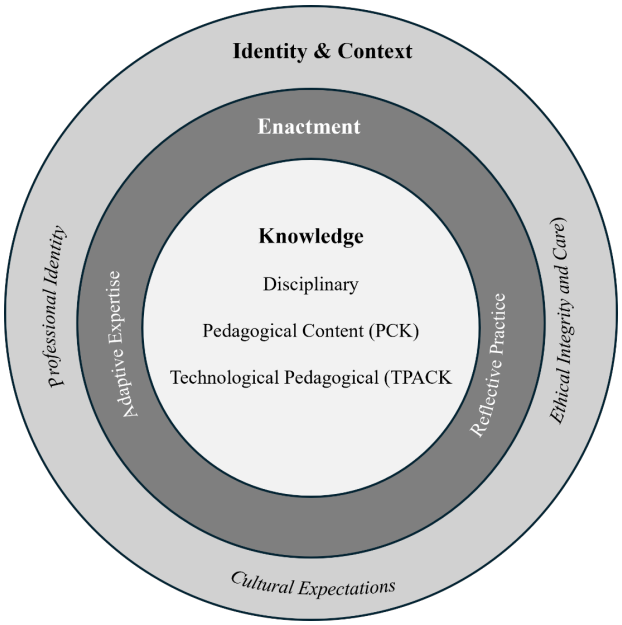

Figure 1. Conceptual Dimensions of Teacher Expertise in Higher Education

2.2 Perceived vs. Actual Expertise

Whereas actual expertise can be determined by the evidence of teaching effectiveness or learning improvement in students, perceived teacher expertise describes the appropriately perceived expertise to be held by other individuals, such as students, colleagues, and administrators. Practically, the two dimensions are not synonymous but coincide with each other. Recent meta-analyses prove that student ratings of teaching (SETS), which constitute one of the more ubiquitous proxies of perceived expertise, are driven by extraneous variables of extrinsic instructor rating and characteristics, grading leniency, and course difficulty. As a result, the perceived expertise tends to be rather affective and relational in character instead of being

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merely cognitive and pedagogy [19].

Cross-cultural studies have revealed that perception is ingrained within the cultural norms. In the Western setting, expertise has often been identified with the aspect of instructional innovation, learner independence, and professional independence. In systems influenced by Confucianism, however, as is the case in China, expertise is linked with moral authority, scholarly rigor, and teacher-student harmony [20]. A recent study by Wang and Hu (2023) on Mingshi (identified as the expert teacher) within Chinese universities conducted in the mixed-methods revealed that perceived expertise included not only the mastery of the subject, but also ethical commitment, fairness, and care (guanai): attributes that refer to the conventional Confucian values. These results emphasize the idea of that expert is not a cross-cultural phenomenon, but a perceptual mediated phenomenon, which incorporates cognitive and moral legitimacy.

Recent theoretical developments propose differentiating **three levels of perceived expertise**:

1. Credibility (understanding and clarity).
2. Affective credibility (empathy, fairness and commitment).
3. Social believability (power and interrelational peace) [21, 22].

This three-part model can be consistent with new world evidence, which has shown that both knowledge competence and relationship ethics are the components of trust students have in their teachers. Therefore, perceived expertise assessment needs tools that are more than a measure of simple satisfaction, a tool that is able to measure the interactions of skill, care and authority in a multidimensional way.

2.3 Measurement and Indicators

The measure of teacher expertise is also a methodological issue particularly when making comparison across the cultural background. The conventional methods of student assessment, peer-monitoring and self-assessment have been challenged on cultural and contextual biasness. The methodological innovations that have been discovered recently focus on triangulation and multi-dimensional tests that include cognitive, affective, and contextual indicators. Quantitative research is analyzing more validated scales based on PCK and adaptive expertise theories and is backed on by strong psychometric practices including confirmatory factor analysis and measurement invariance. Such methods are relevant to make sure that constructs of expertise are understood equally across groups and cultures. As an example, the Chinese operations of higher education studies have managed to adapt, and verify, multi-dimensional instruments of teacher expertise comprising of scales of moral commitment and relational sensitivity-dimensions that are typically not considered within Western measurements [23, 24].

Measurement is also enhanced by qualitative research as it sheds light on the lived life of expertise. According to narrative and ethnographic literature, Chinese educators have defined expertise as a life-long process of self-development (xiushen), which is consistent with the Confucian views of the teacher as a moral exemplar. This is unlike the Westernism developmental models that value reflective implementation and evidence-based enhancement. These understandings stress searching appropriate context-based measurement models to explain cultural epistemological views and institutional realities [25].

Higher realism in the quest to establish cross-cultural comparability, a forum amongst academics in support of hybrid methods is proposed, which will offer both quantitative rigor and qualitative richness. The indicators must include:

Knowledge-based dimensions: disciplinary conquest and pedagogical revolution;

Performance-based dimensions: responsive to feedback, adaptability, and responsive to innovations.

Relational dimensions: interpersonal trust, empathy and fairness.

Ethical aspects: professional uprightness and moral rectitude [26].

Recent research suggests implementing multi-source evaluation frameworks which are student-based, peer-based, self-reflective and institutional review based. They in this way transcend the very small prism of teaching performance to one of holistic conceptualization of teacher expertise as a socially constructed and culturally embedded phenomenon.

3. Cross-Cultural Perspectives on Teacher Expertise

3.1 Cultural Frameworks

The cross-cultural theories aid in explaining the fact that expertise is not a universal template, but an intervention of culture. Work motivated by Hofstede demonstrates anticipations of the power distance, uncertainty avoidance, and long-term orientation using the perspectives of teacher authority, classroom relationship, and indicators that stakeholders interact with to test knowledge. Current systematic discussions on cultural-dimensions studies in education demonstrate that higher power distance environments are likely to condone teacher-managed discourse, formal authority and focus on rightness, less that

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lower power distance environments condone dialogic engagement and pupil autonomy-differences that eventually precondition knowledge of such expertise identity and compensation in higher education systems [27].

In the Confucian Heritage culture (CHC), the role of teachers is adopted as a moral role model whose academic rigor cannot be separated with moral ethics. Recent literature keeps on recording CHC remnants in tertiary educational classes such as deference to rank, bias to systematic directions, and emphasis on exam-congruent savvy as well as the current diversification and renewal. As an illustration, studies on the conceptions of lecturers about online teaching have established that CHC-consonant emphases (e.g., systematic guidance, accountability to student moral-intellectual growth) influence descriptions of conception of good teaching (by proxy teacher knowledge)[28]. On the same note, the studies on internationalization in Chinese universities also indicate that Chinese universities tend to subject international students to minimal classroom dialogue along with limited autonomy, citing the presence of enduring cultural-pedagogical norms that shape judgement of so-called expert teaching [29].

Moral-relational elements with a CHC lens sharpen attention to this aspect, (fairness, care, diligence), and only is part of expertise rather than a side-effect to technique. The concept of message of virtue and scholarly rigour and relational work Quality Qualitative studies and emerging career-trajectory research on Mingshi (expert teachers) expressly weaves together the understanding of the virtues, scholarly rigour and relational labour into place-specific intelligible descriptions of expertise - a culturally mediated criticism of more narrowly focused models about skill [30].

3.2 Comparative Studies

Higher-education studies captured comparatively indicate the overlap, as well as divergence of stakeholder values. New idea: Learner-centered innovation, support of autonomy and dialogue feedback are often mentioned indicators of expertise in a major portion of the West. Moral control, clarity in instructions, fairness, and perseverance are also relevant indicators of content mastery on top of the moral authority, instructional clarity, and fairness and sustained effort in the CHC setting in China and other related settings. The voice-based research among Chinese cross-border students highlights the perceived gap in the area of classroom conversation and formative feedback, which are usually attributed to expert practice in lower power distance settings, to demonstrate that the cultural scripts determine the standards according to which the expertise is evaluated [29].

At the instrument level, using student evaluations of teaching (SETs) as a proxy of perceived expertise will be difficult to do due to comparative work. There are recent analysis and reviews that report intersectional bias and mental-health/career effects on faculty as the SETs are metamorphosed into high-stakes position and they warn not to interpret the SET scores as indicators of instructional expertise without triangulation[31]. Evidence from China-specific contexts (e.g., undergraduate medical education) similarly identifies multidimensional sources of SET bias, reinforcing the need for **measurement invariance** checks before cross-group comparisons of "perceived expertise [32]."

There are also comparative findings such as convergence pressures that are motivated by the digitalization and the global pedagogical currents. The research on the participation of Chinese students and classroom interaction indicates that the value in questioning, immediate feedback and working in groups is increasingly becoming a high priority, and therefore, signs of competence in terms of student-centered practice are becoming increasingly popular- albeit, mediated through local value systems [33]. As summarized in **Table 1**, cultural expectations of teacher expertise differ markedly across Western and Confucian-heritage contexts, influencing both the attributes associated with expertise and the criteria used to recognize it.

Table 1. Comparative Dimensions of Teacher Expertise Across Cultural Contexts

Dimension	Western/Anglo-European Perspective	Confucian-Heritage (Chinese) Perspective	Emerging Hybrid Traits in Chinese HE	Reference Studies
Epistemic Focus	Pedagogical innovation; learner autonomy; reflection	Knowledge mastery; moral exemplarity; authority	Integration of dialogic learning with structured authority	[34]
Pedagogical Orientation	Student-centered, inquiry-based	Teacher-centered, examination-oriented	Feedback-rich structured learning	[35]
Evaluation Criteria	Critical thinking, engagement, student satisfaction	Discipline mastery, effort, fairness	Multi-dimensional evaluation combining SETs with peer appraisal	[36]
Role Identity	Facilitator and mentor	Moral guide and knowledge transmitter	Adaptive professional blending care and innovation	[37]
Communication Norms	Dialogic, egalitarian	Hierarchical, respectful	Negotiated authority through care and competence	[38]

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3.3 Intercultural Adaptations

Cultural scripts are seen in daily expertise judgments as observed in intercultural settings inter-university faculty, joint degree/TNE campuses and mixed domestic-international cohort classrooms. The qualitative study of international teachers in Beijing demonstrates that these teachers are framed both as the pedagogical innovators and the cultural brokers at the same time, but they have to master how to exercise the legitimacy in accordance with the local standards of authority, evaluation, and interpersonal relations management. In other words, expertise recognition depends on adaptive performances which have credibility to different audiences [39].

Instruction concerns the transnational higher education (TNE), which introduces institutional complexity. In a recent communication-oriented model of so-called Triple-A (agility, adaptability, alignment) partnership, partners bargain over curricular standards, classroom discourse norms, and evaluation practices such that on either side of the partnership, expert teaching is intelligible. Such arrangements clarify what translation should be done to ensure that practices (e.g., discussion-led seminars, rubric-based feedback) are in line with host-campus requirements and student cultures [40]. In the meantime, student-perspective research in Sino-foreign universities indicates how students engage in comparative and agglomerative learner-pedagogue relationship, with implications on how they ascribe expertise to faculty members in other traditions [41].

Across these intercultural sites, three recurring adaptation strategies surface:

Norm bridging faculty members articulate dialogic assignments and assessment publicity explicitly, connecting them with desirable outcomes at the local level (e.g., performance in exams, employability);

Authority calibration- teachers communicate both friendly and well-organized with the aim of fulfilling expectations of guidance and allowing autonomy;

Triangulation of evidence-units Now the triangulation of perceptions (student/peer voice) by discipline-specific observation and task-based performance to measure expertise in a fair way across cultural lines. These approaches have been approved by the recent empirical images of the Mingshi development, as well as comparative classroom research that reflects a slow process of hybridization of what constitutes expert practice in Chinese higher education [42]. As shown in **Figure 2**, the pathways to perceived teacher expertise in Western and Confucian-heritage contexts diverge, yet they converge in a hybrid model that integrates both structured pedagogy and relational care.

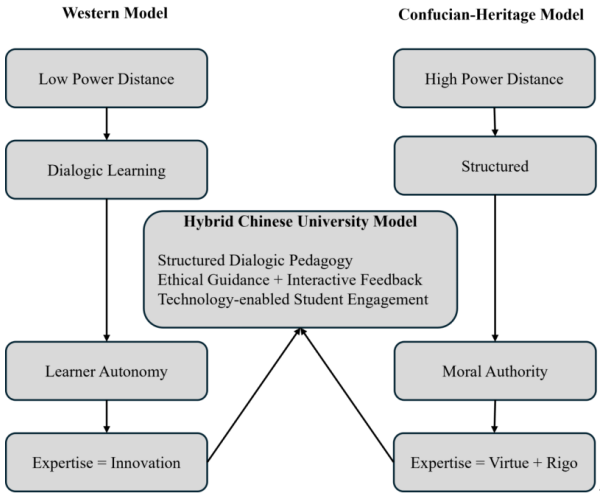

Figure 2. Cross-Cultural Pathways Shaping Perceived Teacher Expertise

4. Teacher Expertise in Chinese Higher Education

4.1 Historical and Cultural Context

The contemporary Chinese system of higher education is founded upon a long tradition of Chinese intellectualism wherein the teacher is taken to signify a moral exemplar and defender of academic rigor- a tradition of Confucian-era culture still presents today (i.e., virtue, fairness, industriousness, relationship harmony) that encapsulates the expectations of the contemporary Chinese understanding of what is meant by an expert teacher. The later historical record records that these moral-relational imperatives are still relevant in the wake of universities taking to the path of massification and globalization; educators continue to be required to balance between scholarly competence and moral practices and treatment of students, and perceptions of expertise tend to conflate knowledge competence with moral behavior and care. Newer literature is keen on tracking how the role of teachers as moral agents has been lessened in the face of social change where the moral authority has been negotiated where the innovative and student-centered practice have demanded innovation and student-centered practices [43].

4.2 Contemporary Reforms and Expectations

During the last ten years, the national policy has put new pressures upon universities to become world-class (best referred to as the Double First-Class, DFC, program). Research on the DFC policy and its second-round modifications indicates how resource distribution, performance goals, and benchmarking of discipline have

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changed institutional priorities, and how these changes can be applied to the definition of teaching expertise, its support and reward. On empirical studies have reported disproportionate efficiency in resources within elite institutions and managerial rationales that benefits calculated output; policy critique has found that indicators of excellence encourage alternative formative investing in pedagogy, except when there is specific governance regarding a balance between research and instruction quality and talent development [44].

Expectations are also being redefined by parallel sectoral trends of internationalization, digital transformation, and quality assurance based on results. Students Studies on student interaction and pedagogy in CHC situations document an increase in focus on questioning, group work, and instantaneous comments, indicating that there is a gradual mutualization of indicators of expertise (not only authority-and-rigor but authority and dialogic and technology-supported facilitation [33]. Meanwhile, employment aspects are important: research on Chinese college professors highlights the growing workload, role ambiguity (teaching-research-administration), and burnout threat, implying that organizational health and managerial practice is currently achieving the maintenance of professional teaching [45].

4.3 Empirical Insights

Recent empirical researches in the Chinese higher education shed light on the perception of students and institutions of mathematical teacher expertise in practice. Qualitative, student-voice studies reveal that ratings of the clarity and equitability of instructions, as well as their care, reflect steadily through content-memorization of technological and file rich learning, including preferences of CHC-associations based on systematized instructions alongside a growing interest in dialogic and participatory learning methods [46]. The instruments mediate perception too: studies of student ratings of teaching (SETs) in China especially in medical and liberal arts undergraduate education report multidimensional bias (e.g., grading leniency, course difficulty, halo effects), and call on the need to reward triangulated and discipline-sensitive evaluation systems [32].

Cross-cutting analyses of DFC implementation at the policy-practice interface can be used to show that indirectly designed approaches to the organization of resources, incentives can lead to perceptions of expertise: like when promotion criteria and recognition programs foreground publication and grants, rather than pedagogical innovation, or when teaching excellence is realized but is poorly resources. All this implies that the perceived expertise in Chinese universities is a hybrid where the moral-relational legitimacy and scholarly authority are still crucial, but more student-centered, feedback rich, and technology facilitated enactments are being identified as the hallmarks of the expert practice.

4.4 Challenges and Opportunities

To begin with, metric drift: high-stakes dependence on short signals (e.g., SET scores, volume of publications) can put the recognition of expertise and permanent learning out of proportion as well as create disparities among pedagogical inequity; recent experiments on meta-analyses of Chinese studies have described bias in SETs and psychological side effects on their use in a punitive manner. Second, work quality and health: a large body of evidence indicates that university lecturers with heavy role strain and burnout have lower needs to maintain an expert performance level, which can only be achieved through systemic concern of faculty staffing, leadership, and time to teach. Third, translating policies: DFC governance may skew excessively to research unless guidelines are explicitly put in place to frame and fund teaching building; assessments of the second round of DFC demand more equalized, talent-grounded models [47].

Opportunities. Methodologically, higher education institutions can take triangulated portfolios of assessment that incorporate discipline calibrated observation, task-based and concept-based learning data, and in others that have been proven to be cultural measurement-invariant-therefore integrating recognition of expertise with that which in actual situations contributes to student learning. Institutionalization of teaching excellence could be planned through strategic policy windows of DFC around career tracks, curriculum and SoTL (scholarship of teaching and learning), and development of leadership aimed at the maintenance of humane workload norms. The increasing value of engagement and feedback in CHCs, pedagogically, provides impetus toward the scale version of hybrid models: organized authoritative and, at the same time, dialogic, technologically mediated facilitation - models that are culturally responsive and simultaneously fulfill the worldwide standards of expert instruction [33].

Taken together, current research portrays Chinese higher education as a site where traditional moral-relational conceptions of the expert teacher are being braided with contemporary expectations for adaptive, evidence-informed, and student-engaging practice—an evolving synthesis shaped by national policy, institutional incentives, and classroom-level negotiation.

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5. Methodological Approaches in Existing Research

5.1 Quantitative Studies

Recent quantitative work on teacher expertise in higher education clusters around three strands: In knowledge-based research (e.g., PCK/TPACK), which aims at clarifying constructs and improving the instrumentation, in perception-based research (e.g., student/peer ratings), which questions the construct validity and, finally, in psychometric research (e.g., measurement invariance), which facilitates valid comparisons across groups and cultures. A systematic scoping review of PCK in tertiary education (2024) at the high givenness, loves constitutes significant conceptual variety and proposes tools that represent enacted (topic-specific, context-specific) PCK and not only declarative knowledge, busts instrumentation employees with challenges in this regard, advocates observation and performance appraisal as work ally to survey measures [48].

Regarding the perception side, more and more analyses are being issued against the application of student assessment of teaching (SETs) due to actual knowledge. A summary of threats to validity on high-stakes FAT-based decisions published in 2024 summarizes some of the threats to validity (grade leniency, course difficulty, rater bias), and risks associated with mental-health and career when SETs are utilized in high-stakes decisions, have been documented; multi-source triangulation is recommended. The 2025 empirical studies, again, indicate that there are no robust connections between SETs and independent measure of learning thus adhering to the diversification argument in evidence portfolio [31].

In methodology, measurement invariance has become standard in Chinese university sample scale development and adaptation with multi-group CFA (and more and more, IRT-based methodology). Perception instruments in a 2024 validation of the Chinese Academic Self-Efficacy Scale (ASES-C), configural/metric/scalar invariance information is established among groups of genders, which offers a clean template (fit indices, reliability, invariance steps) of perception instruments in the field of expertise research. This kind of psychometric preparation is the only prerequisite to a comparison between latent means(s) among cohorts or among institutions or among cultures [31].

5.2 Qualitative and Mixed Methods

Qualitative designs help to cast light on the process and relationship aspects of expertise which surveys may not capture. Longitudinal case studies and narrative inquiries with Chinese expert teachers (Mingshi), a braiding of moral authority, scholarly rigour and relational labour across career trajectories to reveal the ways in which "expertise" is constructed and recognized within institutional ecologies. This work is based on the multi-wave interviews, reviewing the documents, and analytic mamboing as the means of modeling developmental paths and identity work through the time [49].

Mixed-methods studies combine these stories with formal pointers (e.g., observation rubrics, concept-inventory earns or calibrated peer evaluation). Explanatory sequential logic is often used in designs to investigate what mechanisms underlie patterns of scores, and conversational logic (quant Cancel: qual) is used to triangulate student perceptions and evidence of the practices of enacted PCK/TPACK. Most PCK meta-analyses continue to be based on K-12, but greater-education studies are moving to implementing task-based elicitation (video-stimulated recall, PCK-mapping) to enable one to see adaptive decision-making as it occurs in real teaching. This is in direct response to the request of PCK reviews in richer, discipline-specific evidence of how expertise is manifested in university classrooms [50].

5.3 Cross-Cultural Comparative Methods

Cross-cultural comparisons hinge on **equivalence of measurement** and **design choices** that respect cultural scripts. Three techniques are increasingly visible:

Multi-group CFA (MG-CFA) and multi-group IRT/DIF to achieve configural/metric/scalar invariance and then parallel refer latent means. The latest education research (both Chinese samples and international testing) gives the exemplars and reporting standards, step-by-step [51].

Scaling up Consistency optimization (approximate invariance) of large multi-country studies in the case where full scalar invariance is unrealistic. Evidence-based principles and this critical review are now warning that alignment should be transparent (reporting fit, non-invariant items, sensitivity analyses) in order to prevent biased cross-national inferences- inferences that can be directly transferred to cross-system comparisons of perceived expertise [52].

Some cross-culturally designed and inference preservation tools: translation/back-translation plus cognitive interviewing; anchoring items correspond to cultural constructively salient (such as fairness gonging or care guanai); triangulation of perceptions with evidence-calibrating disciplinary observation and learning. Chinese higher education In Chinese higher education, the qualitative-quantitative pairs of Mingshi and student voice are used to show how cultural expectations (moral-relational legitimacy, instructional clarity) can be made analytically

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visible and subsequently represented quantitatively [49].

Practical takeaway. The essential design of an SCI-standard program of research - particularly with an orient on China - would be triangulated, multi-method designs, which (i) operationalize knowledge and enactment (PCK/TPACK + performance/observation), (ii) put in place proven measures of perception with established invariance, and (iii) is to ground qualitative inquiry in the sense of culture specific meanings of knowledge of expertise. The scaffolding minimizes construct under-representation, single-source rating bias, and provides fair and cross-culturally viable estimates of teacher expertise as rated [48].

Table 2 summarizes the key methodological approaches employed in recent research on teacher expertise, highlighting strengths and limitations of each approach in the context of higher education studies.

Table 2. Methodological Approaches in Studies on Teacher Expertise (2020–2025)

Approach	Common Methods	Strengths	Limitations	Ref.
Quantitative	Surveys, PCK/TPACK scales, CFA, SEM, measurement invariance testing	Enables large-scale generalization; strong construct validity	Risk of self-report bias; limited contextual depth	[53]
Qualitative	Interviews, narrative inquiry, classroom ethnography	Captures moral-relational and contextual meanings; rich depth	Limited generalizability; time-intensive	[37]
Mixed Methods	Explanatory sequential (quant→qual), convergent parallel designs	Triangulation of perception and enactment; balances breadth and depth	Complex integration; high data demands	[54]
Cross-Cultural Comparative	Multi-group CFA, alignment optimization, bilingual instruments	Allows cross-system analysis; enhances global relevance	Translation and invariance challenges	[55]

6. Synthesis and Theoretical Integration

6.1 Integrating Cognitive and Cultural Perspectives

Viewing teacher expertise in higher education suggests a confounded complexity of knowledge structures (e.g. PCK/ TPACK), of enacted capabilities (adaptive expertise, noticing), of socio-moral identity - all posted via local cultural logics. Cognitively, a 2024 higher education scoping review forms a belief that PCK is still fundamentally based yet frequently under-specified unless it happens to be topic-specific misconceptions and tasks that render the aspect of PCK-in-use specifiable; transient reviews of TPACK caution against checklist mentality and maintain that demonstrating technological enactment is more likely to provide evidence of its enactment instead of self-reporting. These strands may briefly be advised to promote performance-based modes of expertise instead of fixed inventories.

Bridging to enactment Expert teacher research in Orientation to teaching: urgently needed knowledge on professional practice failure to: Adaptive vs. Content Knowledge Expert teacher research explained. situations of Professional practice to describe how expert teachers bridge disciplinary knowledge to consequential learning: identification of salient cues, anticipation of difficulties, and reorganized instruction under constraint. New scholarship in the field of higher education transparently constructs adaptive expertise as breakdown-and-repair problem solving in live classes, whereas mathematics education generalizes noticing as the attentional and interpretive engine of any in-the-moment decision-making-mechanisms that can be foundational to any integrative theorization of expertise [56].

Culturally, the focus of Chinese higher education is on the educator's moral-relational legitimacy (virtue, fairness, care) as well as scholarly authority. Medications: Assessing how these CHC-remnants of pedagogical hypospadias, if not displaced are, in fact, contested in the age of massification, digitalization, and internationalization, yielding a hybrid ideal: authority and rigor coexisting with dialogic pedagogy popularized via feedback and feedforward. The Mingshi (expert teacher) literature exemplifies this inventive braid of excellence in relation and virtue and disciplinating action as a locally meaningful route to recognized expertise [43].

6.2 Emerging Patterns

The first is hybridization: the signifiers increasingly appreciated by higher education in China (formative feedback, collaborative work, technology-mediated interaction) come from the canon of Western learner-centric epistemic values - yet at the same time CHCs do not abandon proprietary virtues of ethical exemplarity and opacity. Additionally, as global competitiveness is the goal of national policy (e.g. Double First-Class), these two demands are translated into incentive frameworks in which research output may be supercharged while teaching recognition is inadvertently rewarded underfunded if governance does not explicitly weight rewards. This policy environment provides an environment that affects what performances

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count as "expert".

The second is methodological convergence to a process of triangulation. Across systems, an overuse of single source student evaluations is becoming indefensible: recent literature reviews validity threats (leniency, difficulty, rater bias) and career risks with SETs used punitively: growing pressure pushing the use of multi-source evidence (discipline-calibrated observation, task/learning gains, peer review) before drawing expertise conclusions. The cautions have been heard in Chinese studies, which reaffirms that purported expertise needs to be located in a multiplicity of evidence [44, 57].

Psychometric maturity is the third pattern for cross-cultural work. Measurement invariance testing (configural/metric/scalar) and has already become a common practice in Chinese university samples, increasing the reliability of cross-group comparisons and providing a sample for constructing perception scales containing moral-relational dimensions. Without invariance, latent mean differences are at risk of reflecting styles of response to the materials rather than substantive differences in perceived expertise [58].

6.3 Conceptual Gaps and an Integrative Model

Three gaps persist. (i) Using evidence in practice at university: beyond gaining traction since, the challenge in higher ed contexts is that professional reasoning on the fly is under-represented compared to K-12; task-, video- and observation-based research designs that account to micro-mechanisms of adaptive expertise is warranted. Second, regarding the construct coverage of cultural responsiveness, because moral-relational items (e.g., fairness, care) used by Chinese stakeholders in judging expertise were not included in most instruments, they are candidates for theorization and corresponding scale development. (iii) Policy-practice alignment- excellence agendas (i.e. DFC) are patchy in the extent to which they place their resources in supporting expert teaching as opposed to research; organizational studies are invited that link the design of incentives to perceptions and actual aspects of expertise [48].

We offer an Integrative Cultural-Cognitive Model of Perceived Teacher Expertise for Higher Education, which is as follows:

Knowledge Structures: PCK/TPACK discipline-specific knowledge requirements at the topic level.

Enactment Mechanisms: Adaptive expertise, not noticing as a mechanism of monitoring and coordination of goals, evidence, and constraints in real time.

Identity and Ethics: professional identity and moral-relational commitments as alters of legitimacy.

Cultural Frame: CHC and other cultural-logical1 weights (power, equity, caring, dialogic practice).

Evidence Portfolio Multi-source, invariance-tested indicators (learning outcomes, performance tasks, calibrated observation, peer/student voice)

A model of recognition of expertise, which hold that recognition of expertise occurs when enacted knowledge and ethical identity is credible to stakeholders of the contribution within a given cultural frame as well as recommendations and practical design principles for recognizing in-service teacher expertise: Provide task-anchored assessments of PCK-in-use; Provide opportunities to document adaptive moves using noticing protocols; Provide measures of institutional moral relations validated for invariance; and Have practice-based incentives so that evidence portfolio-not one measure-drives recognition and development. In terms of a Chinese context, in terms of Chinese higher education specifically, this kind of a framework may be able to maintain some indigenous values, but it is also valid and fair enough on the international platform **[59, 60]**. **Figure 3** presents an integrative model of teacher expertise, combining cognitive, cultural, and institutional dimensions to explain how expertise is constructed and recognized in higher education settings.

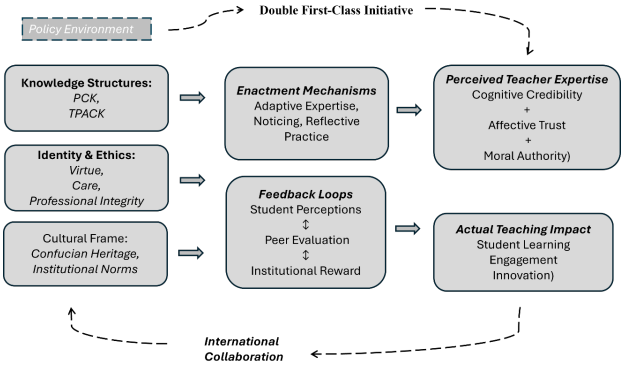

Figure 3. Integrative Cultural Cognitive Model of Perceived Teacher Expertise

7. Implications and Future Directions

7.1 For Policy and Practice

Chinese universities work within an institutional policy environment constituted by the context of the triple challenge of a Double First-Class (DFC) agenda, which has opportunities to institutionalize teaching expertise with research excellence if reconfiguring incentives to give equal importance to pedagogy. Concretely, institutions should (a) make teaching excellence a promotion-qualifying criterion (not only a tie-breaker), (b) earmark resources for pedagogy in disciplines (DFC and internal funding) and (c) institutionalize teaching-focused careers paths with parity in prestige and career progress. Recent policy analyses of the

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second DFC round highlight the risks when output-heavy are used as an indicator - to the extent of crowding out developmental investments in instruction; therefore, it is important to have a balanced finding portfolio of indicators to avoid unintended distortions [61].

At the program level, evaluation systems should triangulate evidence and de-risk the overreliance on end-of-course student evaluations of teaching (SETs). Reviews show that intersectional biases and course-structure artifacts contaminate SETs; bias-mitigation prompts help but do not substitute for diversified evidence (peer observation, discipline-specific performance tasks, and learning gains). Policies should require multi-source dossiers for high-stakes decisions and explicitly prohibit single-metric determinations [62].

Culturally responsive practice in Chinese higher education should render visible moral-relational dimensions (fairness gonging, care guanai, diligence) with which students and colleagues identify expertise and scale-up dialogic feedback-rich pedagogy related to global learner-centered paradigms. Empirical depictions of Mingshi (recognized expert teachers) demonstrate the ways in which credibility is developed at the nexus of disciplinary rigor and relational labour - institutions can facilitate this through mentoring systems, workload protection maintained for redesigning courses and recognition systems that reward ethical - relational contributions to learning communities.

7.2 For Research

First, it proceeds with theory-based constructs that combine concept/course related PCK with practice or doing (adaptive expertise, noticing), professional identity, and moral-relational commitments. The case for the importance of capturing PCK-in-use through uses of tasks, observations, and performance assessments (as opposed to using self-reports only) was manifested in the 2024 scoping review of PCK in higher education. Through the combined application of open task banks (containing common misconceptions, rubrics, and threshold concepts) researchers can collectively publish task banks to allow cross-disciplinary cumulative science [63].

Second, consider psychometrics to be infrastructure. Before cross-program, cross-cultural comparisons of perceived expertise, determine measurement invariance 'Tabular data' about measurement invariances within unified model - Tableaus of satiation items among variants - Which has cleaning and not so long as 'numerals' locus of instruction - Standardized non-invariance - Transparency of measurement invariance / non-invariance per item & report - Reports: satiation item level. Recent validations obtained with Chinese university samples (e.g., ASES-C; bilingual instruments for LMS experience), form templates for CFA/IRT workflow and alignment and bilingual calibration: These practices should be routine with perception instruments used in expertise research [51, 64].

Third, decenter SET as dependent variables and outcomes. Given strong evidence of prejudice and poor relations to long-lasting learning, future studies are required which show multi-source portfolios (discipline calibrated observation, concept-inventory gains, authentic performance tasks) as models and test bias-intervention messaging as part of the research design, not as only a control. Among organizations for Safety Education and Training (SETs) included were pre-registered analytic plans, waveform covariates including course of difficulty/assessment regime and sensitivity analyses [65].

Finally, link micro to macro. In order to test the role of reward structures in characterizing perceived and actual expertise, studies will employ the proposed framework where policy research efforts at the classroom-level (enactment studies) are combined with policy research efforts at the organizational level (incentive designs during the DFC era). Mixed-methods designs - for example, explanatory sequential studies linking performance-based evidence to promotion decisions under varying policy regimes - can be used to find leverage points for (policy) governance reform.

7.3 For International Collaboration

Transnational education and joint programs constitute themselves ideal laboratories within which the process of co-defining expertise across cultural frames takes place. Partnerships ought to (a) co-create shared competency maps for expert teaching where pedagogy of the learning work CHC values (moral exemplarity, fairness, clarity) peeled and braided with dialogic, learning student-centered practices (b) use tri-jurisdiction evaluation portfolios (student/peer voice + calibrated observation + evidence of learning) with agreed psychometric standards (c) invest in faculty mobility with pedagogical purpose (co-teach studios, video-elicited lessons of learning studied) not short visits. Using Mingshi trajectories, this paper reveals ways in which contrasting forms of normalizing authority, care and excellence are locally woven into scholarly discourse; collaborative faculty development will translate some of those signals for mixed groups and dual degree [49].

Ongoing research publications, then, need both open methodological toolkits and ready-from-the-shelf tools: invariant, bilingual instruments, a bank of content and pedagogical tasks of chosen disciplines, observation protocols a notch above those borrowed directly from

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K-12. Where institutions still need SITs, they should use bias-mitigation and norm-bridging messaging and communication to demonstrate why dialogic works, was-by-was, and formative feedback are signs of learning and pathways to examination success - global norms acting in line with local principles [66].

Bottom line: Policy windows, generated by DFC, maturing understanding of PCK-in-use, and growing psychometric rigor make feasible the building of systems where perceived teacher expertise is not only recognized fairly, but it is also nurtured systematically, and aligned in what are the most productive drivers of student learning - within China and in the context of international partnerships [67]. **Table 3** outlines policy-level strategies and institutional actions that can help enhance the recognition and development of teacher expertise in Chinese higher education.

Table 3. Policy and Institutional Implications for Enhancing Teacher Expertise

Level	Policy Action/Strategy	Intended Outcome	Challenges	Illustrative Evidence/ Examples
National (Macro)	Integrate teaching expertise into Double First-Class performance metrics	Elevate teaching excellence alongside research outputs	Overemphasis on quantitative metrics	[68]
Institutional (Meso)	Create teaching-focused career tracks and SoTL (Scholarship of Teaching and Learning) funding	Retain expert teachers; foster pedagogical innovation	Resource allocation imbalance	[69]
Departmental (Micro)	Use multi-source evaluation portfolios (peer review, student learning data, self-reflection)	Fair and holistic expertise recognition	Administrative complexity	[70]
International/ Collaborative	Develop shared intercultural teaching competency frameworks	Cross-cultural comparability of expertise indicators	Linguistic and contextual adaptation	[37]

8. Conclusion

Teacher expertise isn't a static object of skills or an all-understood definition, but a dynamic cultural combination of knowledge, practice, identity and moral legitimacy. In the rapidly changing Chinese higher education, as this review has identified, the notion of expertise is indelibly shadowed by the Confucian traditions of selected values and the international trend of higher education pedagogy. This is a hybrid model-one where intellectual rigor and moral authority are linked with innovation, agility, and dialogic interaction. By placing the teacher's expertise within the intersections of cognition, culture, and also policy, the discussion recommends that excellence in teaching needs to be conceptualized as a process of social building up cultural meanings and contextually bargained, somewhat than an exclusively technical or individual constructive in nature. The review of recent empirical and theoretical research highlights a number of points. Cognitively speaking, pedagogical content knowledge (PCK) and adaptive expertise are of primary concern but are given separate meanings when integrated into Chinese cultural values dictating hard work, fairness, and relational harmony. Methodologically, cross-cultural validity and the concept of measurement invariance have become critical in establishing credible comparison in order for constructs of perceived expertise to not be skewed by linguistic or cultural bias. Institutional - DFC initiative has both created opportunities and tensions in driving quality enhancement at the same time as highlighting inadequacies in the recognition and support of excellence in teaching. Collectively, these findings underscore the importance of multi-source, triangulated frameworks of evidence that will bring together evaluation of expertise with meaningful evidence of learning that is ethical and equity-minded in institutions. There are three imperatives that become apparent. First, funding systems need to be adjusted to acknowledge expertise as a measure of excellence, with the required incentives for pedagogical excellence equal to those for research output being built into measures of merit and funding. Second, theoretical integration should be broadened into areas where cognitive and cultural models are connected - reflecting how expertise is performed, attained and upheld across contexts. Finally, international cooperation should be employed to co-construct culturally inclusive conceptions of teacher expertise that draw together the aspects of pedagogical novelty common to the world's cultures and indigenous conceptions of moral and relational work with others.

In conclusion, the research about perceived teacher expertise in the Chinese higher education goes beyond the local; contributes to the global reconstruction of what it means to be an "expert" teacher in the twenty-first century. By embracing the twin perspectives of universal versus specific, the discourse about teacher expertise heads toward a less atomized, less stark, and much more authoring and responding to the demands of an interconnected, culturally insignificant Academic world.

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