



Designing an Industry-Based Mandarin Project-Based Learning Model through Micro-Credentialing and Task-Based Language Teaching to Enhance Business Competence

Erma Domos¹, Zulyani Zulyani², Adrian Irnanda Pratama³

Politeknik Negeri Bengkalis, Indonesia

Keywords

Mandarin for Specific Purposes (MSP), Project-Based Learning (PBL), Task-Based Language Teaching (TBLT), micro-credentials, business competence

Abstract

Mandarin Chinese proficiency has become increasingly for international business communication, especially given China's position as global economic power. However, traditional language instruction often falls short in preparing learners for real-world business contexts, where advanced competencies such as negotiation, cross-cultural interaction, and professional communication are required. While Project-Based Learning (PBL) and Task-Based Language Teaching (TBLT) have proven effective in fostering authentic language use, and micro-credentials provide verifiable recognition of workplace skills, there remains a gap in integrating these approaches into a comprehensive, industry-based Mandarin curriculum. To bridge that gap, the present study introduces the Industry-Based Mandarin Language PBL Model that integrates PBL, Task-Based Language Teaching (TBLT), and micro-credentials into business competence development. A quan-qual research design was employed to gather information from students, alumni and industry respondents through questionnaires and needs analyses. Results show a clear demand from the user and employer communities for industry-relevant Mandarin in speaking, writing, negotiation and report preparation, and a preference for practical, task based learning and recognition by micro-credentials. The conceptual model proposed in this study represents an overarching, competency-driven, academia–industry interface that would constitute a sustainable approach in the development of competitive graduates skilled in Chinese (in the form of Mandarin) and business.

✉ Corresponding Author:
E-mail: emmadom.os@gmail.com

INTRODUCTION

In the era of globalization, a good command of Mandarin Chinese is an invaluable asset one can have and it is especially so in the world of business. China ranked first as the world's largest economy, and Mandarin has become an important language of business communication (Song, et al.2025). Industries from technology, finance, manufacturing to global trade are also hungry for bilingual professionals who can operate and thrive in the Chinese business environment. Yet the need for competent speakers in business workplace is often not limited to basic language proficiency, nonetheless requiring higher productivity in terms of communication, negotiation and social interaction, highlighting its importance at the work, as well as in official correspondence and business writing (Sharma et al., 2024; Rahman et al., 2025).

More classroom-oriented learning approaches, such as PBL and TBLT, have evolved out of the recognition that traditional language teaching methods frequently fail to adequately prepare students for the type of business encounters they are likely to face in their real-world lives (Ping, 2015; Li, Noordin, & Ismail, 2020; Mei & Wang, 2023). Nuanced to contextualized/nuanced task-oriented problem-solving methods: Promoting such practical, authentic task-dominant classroom approaches to develop practical communication language skills that are vital for everyday-life communication in present-day business setting (Sun & Zhu, 2023; Song & Turner, 2024). Furthermore, the concept of micro-credentials has been acknowledged in the academic sphere as a way to formalise and validate certain skillsets, allowing graduates to not only have knowledge of the language, but to be able to use the language in a professional capacity (Scott 2022).

The challenges of a dynamic global economy have prompted a shift from traditional teacher-centered methods like the Present, Practice, Produce (PPP) model, which focus on incremental linguistic teaching, to Competency-Based Education (CBE). CBE prioritizes mastering specific skills rather than "seat time," emphasizing clearly defined learning outcomes that directly relate to workplace tasks (Jiménez Rodríguez et al., 2024; Wikipedia Contributors, 2025). This approach recognizes that valuable learning can happen outside the classroom and allows individuals with prior experience to progress more quickly, aligning with the modern workforce's need for continuous upskilling and reskilling in a flexible and efficient way (Huang & Huang, 2023) This shift also acknowledges the importance of integrating communicative competence with practical application, moving beyond mere linguistic proficiency to encompass the nuanced demands of professional environments (Khansir & Salehabadi, 2019).

While the demand for Business Mandarin is unequivocally strong, and the effectiveness of modern pedagogical approaches such as Project-Based Learning (PBL) and Task-Based Language Teaching (TBLT) is well-documented, a significant gap exists in the academic literature. An integrated and systematic framework is needed for the development of the Chinese curriculum, which should be capable of combining the most effective pedagogical approaches with an industry-driven credential

model to attract and encourage students to continue to study Mandarin. There is a lack of alignment with the aspirations of academic courses and the actual, concrete, industry-tailored competences expected by employers. This discrepancy is especially notable given the lack of an integrated framework connecting the potential of PBL, TBLT, and micro-credentials in an extended, coherent, and documentable instructional design.

Theoretical Foundations: Core Pedagogical and Credentialing Models

Project-Based Learning (PBL) is an active learning method that promotes inquiry, research, critical thinking and problem-solving and cooperation and self-directed PBL learning. It breaks out of the traditional 'sage on the stage' model of receptivity, encouraging acquisition of 21st century skills from collaboration and communication to creativity (Bell, 2010; Mei & Wang, 2023). (Hidayati et al., 2024). Considering the role of Chinese EFL learners, empirical studies reveal that PBL is effective in promoting oral communicative competency – such as fluency, range of vocabulary, and confidence – and the development of soft skills or abilities – collaboration and self-regulatory skills. Compared to the teacher-centered Confucian-heritage model, this student-centered instruction is effective in promoting students' creativity and cooperation, and PBL provides a good framework for tackling authentic, industry-linked problems (Chen et al., 2023; Mei & Wang, 2023).

Task-Based Language Teaching (TBLT) is based on real-life tasks that oblige learners to use the target language in genuine situations so as to facilitate meaningful conversation and enhance both language and communicative proficiency (Sholeh et al., 2020, 2021). TBLT promotes active interaction, fluency, and accuracy via the practical application of tasks along a continuum from everyday activities to professional ones. Associated with being one of the teaching methods in response to the traditional, teachers-panned approaches, TBLT (Task-based language teaching) promotes the application of the second language system in accomplishing certain goals which facilitates high engagement and motivation (Nita et al., 2020; Zhaochun, 2015). Nonetheless, implementing TBLT successfully necessitates teacher training, institutional backing, and a communicative program of studies. The application of TBLT comes with challenges also in terms of assessment, especially in the sense that assessment measures need to closely reflect TBLT's communicative orientation since the conventional measures are largely exclusive in terms of grammar and vocabulary (Suherman, 2018; Nita et al., 2020; Nghia & Nguyen, 2021).

Micro-credentials are credentials that validate demonstrated competency in a skill or set of skills through a focused, short duration learning experience, providing a capacity for professionals to upskill and reskill efficiently and flexibly. They are also an alternative to conventional degree programmes that can be offered at a lower cost and enable learners to rapidly gain specialized knowledge demanded in our rapidly evolving job market context (Gamage & Dehideniya, 2025). From an employer's perspective, micro-credentials are valuable for workforce development and talent acquisition, with 95% of organizational leaders recognizing their benefits. Employers often view candidates with these

credentials more favorably, even offering higher starting salaries. For learners, micro-credentials enhance skill confidence, improve chances of securing internships, and increase opportunities for career advancement. Their modular nature allows for the creation of personalized skill sets, enabling learners to carve out unique and competitive career paths (Gamage & Dehideniya, 2025; Kiiskilä et al., 2023; Thorne et al., 2023; Yılık, 2021; Zdunek et al., 2024).

The integrated model can be represented visually to clarify the different roles and combined contributions of each component as in the table below:

Table 1. Three main components that contribute to the integrated learning model:

Component	Primary Focus/Function	Contribution to the Integrated Model
Project-Based Learning (PBL)	Extended, interdisciplinary projects for real-world problems; fosters critical thinking, problem-solving, and collaboration.	Provides the overarching, authentic context and collaborative framework for a holistic learning experience.
Task-Based Language Teaching (TBLT)	Completion of specific, real-world tasks to promote communicative competence and linguistic fluency.	Serves as the micro-level pedagogical engine, providing scaffolded, authentic language practice within the broader PBL project.
Micro-credentials	Validation of specific competencies and skills; provides a flexible, modular certification.	Acts as the formal validation and assessment tool, certifying the practical outcomes and competencies developed through the PBL/TBLT curriculum.

This research presents a new model of industry Mandarin Chinese curriculum based on TBLT and PBL, and micro-credentials. The model meets market needs and is underpinned by an established certificate in business Chinese making a coherent and academically sound foundation for embedding business competence in the learning of Mandarin. By integrating these constructs, the study fills a void in current literature and it moves away from traditional lecture-based practices to a student-centered, authentic learning paradigm that increases language competence and the generation of real-world solutions.

The implications of this study are that there may be generalisability to curriculum design from professional language curricula on vocation courses in other industries. The infusion of PBL/TBLT pedagogy within the context of a detailed needs analysis and validation by micro-credentials provides a flexible, adaptable model for providing upskilling in industries requiring reoccurring skills. This paper adds to the larger dialogue on lifelong learning and advocates for a competency based, modular method for individuals to stay competitive and successful throughout the work-life continuum.

METHOD

1. Research Design

This study is designed using a mixed-methods research design which involves both quantitative and qualitative components to achieve an in-depth understanding of the research problem. We will use a cross-sectional design using a survey approach which will be conducted at one point in time from different types of stakeholders. This is particularly suitable for finding out what the needs, problems and preferences in respect of business Mandarin language skills in this industry are. The results of the survey will provide the data for a needs analysis that will ultimately influence the design of an industry-orientated Mandarin language PBL.

2. Population and Sample or Research Subjects

The target population for this study includes three key stakeholder groups: students, alumni, and industry professionals, all of whom are directly involved with or impacted by Mandarin Chinese proficiency in a professional context.

- **Students:** This group consists of students from Politeknik Negeri Bengkalis, particularly those from departments like Digital Business and International Business Administration, with a sample size of 250 students.
- **Alumni:** This group includes alumni working in companies where Mandarin proficiency is relevant, such as multinational corporations or businesses with ties to China. The sample size range around 122 alumni.
- **Industry Professionals:** This group consists of representatives from enterprises that employ graduates of Politeknik Negeri Bengkalis, with a specific focus on firms maintaining collaborative partnerships in Mandarin-speaking regions. The targeted sample size for this group ranges from 42 respondents

A purposive (judgmental) sampling strategy will be employed to identify and recruit participants who fulfill the precise selection criteria established for the study.

3. Research Instruments

This research primary instruments of data collection include three customized questionnaires for three groups, students, industrial participants and alumni. These surveys will provide quantitative (closed-ended questions with Likert scales) and qualitative (open-ended questions) data.

- **Students survey:** This survey gauges students' perception of the relevance of Mandarin for their future careers, learning preferences, and the appeal of Project-Based Learning (PBL) and micro-credentials. It also presents their most significant learning obstacles.
- **Alumni Questionnaire:** This questionnaire aims to solicit the alumni's self-assessed level of Mandarin proficiency, its application in the workplace, and its role in professional development. It's also looking to hear respondents' thoughts on whether their college experience has been helpful in real-world business contexts, as well as attitudes on PBL and

micro-credentials.

- **Industry Professional Questionnaire:** This questionnaire examines the significance of Mandarin skill in their companies, the activities that require Mandarin proficiency, and the importance they attach to practical experience and micro-credentials in new employees. It also explores their preparedness to work together on curricula.

The use of closed-ended items will yield structured data on attitudes and perceptions, where open-ended items will provide more detailed comments that can help guide curriculum design.

4. Data Analysis

The quantitative and qualitative analyses will be used on the gathered data in a mixed-method study.

- **Quantitative Analysis:** Data collected from closed-ended questions will be analysed using descriptive statistics including frequency, percentage, mean and standard deviation. This will condense the demographics and scale scores and the corresponding responses, finding a common trend in attitude and need for each of the three groups.
- **Analysis of Qualitative Data:** Thematic analysis will be used for open-ended questions by coding, charting, and mapping responses on key themes, insight themes for task, challenges, recommendations. Such information will serve as the context for the PBL curriculum topics and assignments.
- **Triangulation:** The quantitative and qualitative data will be integrated to ensure a comprehensive understanding. The quantitative analysis will offer an overview, while the qualitative analysis will provide detailed explanations, ultimately guiding the final curriculum design.

RESULTS AND DISCUSSION

The demographic profile of the respondents indicates a diverse composition across students, alumni, and industry professionals. Male respondents dominate the sample, particularly among students (87%) and alumni (78%), although female representation is higher within the industry group (30%). The majority of student respondents are aged between 18–22 years old (60%), while most alumni fall within the 23–25 age range (49%). Academic backgrounds are spread across several programs, with Digital Business (24–33%), International Business Administration (24–29%), and English (20–21%) being the most common fields of study. In terms of alumni graduation years, the largest group graduated in 2018 (41%), followed by 2019 (33%) and 2020 (26%).

From the industry perspective, respondents are largely associated with multinational corporations (41%) and companies linked to Chinese or Mandarin business relations (25%). Company locations are spread across major provinces, including Riau (24%), Riau Islands (19%), Medan (29%), and Jambi (17%). The companies vary in scale, with significant representation from larger firms employing

more than 500 employees (35%). The professional roles of respondents include marketing managers (25%), sales/account executives (16%), businessmen (12%), and consultants (10%), reflecting diverse career trajectories. Notably, nearly half of the respondents (48%) reported having learned Mandarin, and a large proportion (83%) confirmed that their companies operate in Mandarin-speaking countries, highlighting the strategic importance of Mandarin proficiency in their professional environments. The overall demographic data of the respondents can be seen in the table below.

Table 2. Respondent demographic data

Category	Choice Answer	Student	Alumni	Industry
Gender	Man	87%	78%	70%
	Woman	13%	22%	30%
Age	18-22 years old	60%	-	-
	23-25 years old	-	49%	-
	26+ years	8%	-	-
Departments and Study Programs	Digital Business	24%	33%	-
	Administration International Business	24%	29%	-
	English	20%	21%	-
	Road and Bridge Design Engineering	16%	8%	-
	Other	16%	9%	-
Semester/ Graduation Year	Semester 1-2	32%	-	-
	Semester 3-4	28%	-	-
	Semester 5-6	24%	-	-
	Semester 7-8	16%	-	-
	Graduation Year 2018	-	41%	-
	Graduation Year 2019	-	33%	-
	Year 2020++	-	26%	-
Industry/Sector	Multinational Corporation	36%	41%	41%
	Related companies with Chinese or Mandarin	48%	25%	25%
	Other	16%	34%	34%
Company Location	Riau Province	24%	-	24%
	Province Riau Islands	19%	-	19%
	Medan	29%	-	29%
	Jambi	17%	-	17%
	Other	12%	-	12%
Amount Employee	< 50	12%	-	12%
	51 - 200	24%	-	24%
	201 - 500	29%	-	29%
	500+	35%	-	35%
Current Job	Manager Marketing	25%	-	25%
	Sales/ Account Executive	16%	-	16%
	Businessman	12%	-	12%
	Consultant	10%	-	10%
	Other	37%	-	37%
Once Learning Mandarin	Yes	48%	-	48%
	No	52%	-	52%
Industry/Company Work	Multinational Corporation	41%	-	41%
	Companies that have connection with Chinese or Mandarin	25%	-	25%
	Other	34%	-	34%
Does the Company Operate in a Mandarin- Speaking Country ?	Yes	83%	-	83%
	No	17%	-	17%

The results of this study revealed findings from questionnaires distributed to three groups of respondents: students, alumni, and industry representatives, as shown in the data below:

Table 3. Interpretation of data from 250 student respondents and practical implications

Category	Findings	Implications Practical
I. Needs and Expectations for Mandarin Language Learning		
Importance Mastering Mandarin in Context Business	92% of respondents feel Mandarin is very important or important in context business.	Learning program Mandarin is necessary prioritized in university curriculum, in particular for interested students in career business international, with focus on needs business.

Main Reason for Wanting Mandarin	72% of respondents want to Study Mandarin for future career they.	Approach learning need more emphasize application real in the business world, such as skills communication business and understanding culture China.
Frequency Use of Mandarin in the World of Work	60% of respondents feel they will often or Enough often use Mandarin in work they.	Learning must emphasize conversation business, negotiation, and creation report business in Mandarin appropriate with need industries that use Mandarin in interaction international.
Most Desired Language Skills	Skills speaking (40%) and writing (24%) are the most desired.	Prioritize development skills speak in context communication business, including conversation, presentation, and negotiation in Mandarin language.
II. Preferences Regarding Learning Methods		
Interest in Learning Based Problem (PBL)	92% of respondents interested in PBL.	The PBL method must become an integral part of the program, with tasks that reflect situation real in the business world, such as studies case or presentation product in Mandarin language.
Preference to Learning Practical or Theory	60% of respondents more Like task practical than theory Language.	Focus learning on assignment practical, such as simulation business or role-playing in negotiation international, relevant with the world of work.
Need Certificate or Confession Competency (Micro-Credential)	52% of respondents feel important For get certificate after the program is finished.	Give certification or micro-credential for confess competence students, who can become mark plus in search work, as well as confession professional to skills they.
III. Challenges and Support Needed		
Challenge in Learning Mandarin	Challenge the biggest is difficulty speak with smooth and limited time For Study.	Need more Lots session practice speak with speaker original or through interactive digital platforms. Online learning or blended learning can become solution For overcome limitations time.
Support Needed	36% of respondents need session practice with instructor.	Provide access to instructor competent For session conversation directly and give material addition about context business For increase mastery Mandarin language students.
IV. Expectations for the Learning Program Industry Based		
Expectations for the Program for Increase Workplace Skills	88% of respondents hope this program can increase workplace skills they.	Mandarin- based language program industry must customized with needs of the world of work, such as negotiation international and manufacturing report business in Mandarin language.
The Most Rewarding Task in the Learning Program Industry Based	Task related negotiation, creation report business and presentations highly desired product.	The program must enter tasks that reflect need industry, such as simulation negotiation and creation report business in Mandarin, which helps student prepare self For challenges of the world of work international.

The questionnaire administered to 250 student respondents was designed to investigate their needs, preferences, and expectations regarding Mandarin language learning in a business and industry context. The instrument consisted of four main sections: (1) Needs and Expectations, focusing on the perceived importance of Mandarin, reasons for learning, frequency of expected use, and desired skills; (2) Learning Methods, including interest in Problem-Based Learning (PBL), preferences for practical versus theoretical tasks, and the value of certification or micro-credentials; (3) Challenges and Support, exploring barriers such as speaking fluency and time constraints, as well as the types of support students considered most useful; and (4) Industry-Based Expectations, addressing the anticipated benefits of Mandarin for workplace readiness and the most valuable business-related tasks for practice.

The results revealed several key findings. A vast majority (92%) regarded Mandarin as important for business, with career prospects identified as the main motivation (72%). Speaking (40%) and writing

(24%) were considered the most essential skills, and 60% expected frequent use of Mandarin in professional settings. Students expressed strong interest in PBL (92%) and preferred practical tasks (60%) over theoretical study, with more than half (52%) emphasizing the importance of certification or micro-credentials as formal recognition of competence. Challenges included limited fluency and time constraints, while 36% highlighted the need for more guided practice with instructors. Finally, most respondents (88%) expected industry-based Mandarin programs to enhance workplace readiness, with negotiation, business report writing, and product presentations identified as the most valuable learning tasks.

Following is table that summarizes data interpretation with focus on implications practical For 122 respondents' alumni:

Table 4. Interpretation of data from 122 alumni respondents and practical implications

Category	Findings	Implications Practical
I. Experience Learning Mandarin During College		
Mandarin Language Competence After Education	26% of alumni felt very competent, 37% felt Enough competent.	Learning program must more focus on skills practical, such as speaking and writing, to prepare alumni to face demands jobs that require Mandarin language.
The Most Useful Skills in Work	49% of alumni feel skills speaking (verbal communication) is the most useful, followed by skills writing (25%).	Prioritize development skills speaking and writing, especially in context business international, for increase ability alumni communication in the global workplace.
Compliance Learning Mandarin with the World of Work	41% of alumni feel learning is very relevant, 16% feel not enough relevant.	Customize learning Mandarin with the needs of the world of work, including teaching business vocabulary and exercises communication in context professional.
II. Use of Mandarin in the World of Work		
Frequency Use of Mandarin in Work	16% of alumni use Mandarin every days, 41% several times a week.	Learning program must prepare alumni for use Mandarin regularly in work, including conversation business and formal communication.
Tasks That Require Use of Mandarin	Alumni use Mandarin for writing business emails, negotiating, attending meeting, and presenting product.	The program must covers task practical like writing professional emails and negotiations in Mandarin, as well as exercise presentation business For skills speak.
Influence Mandarin Skills to Career	41% of alumni feel Mandarin skills are very influential progress career of them, 33% felt Enough influence.	Emphasize importance skills Mandarin for speed up progress career in learning programs, as well as apply skills the in environment professional international.
III. Input For Industry- Based Mandarin Learning		
Task or The Most Useful Problem	Alumni want task like simulation negotiation, drafting report business, and speaking with client or partners international.	Program based industry must enter task relevant like simulation negotiation and creation report business in Mandarin for implemented directly on the spot Work.
Effectiveness Learning Based Problem (PBL)	49% of alumni consider PBL very effective, 33% quite effective. effective.	Apply PBL method in learning programs with tasks that involve situation real world business, such as negotiation international and assignments business other.
Benefits of Certificates Competency (Micro-Credential)	57% of alumni feel certificate competence is very helpful development career they.	Learning program must provide certificate competencies (micro-credentials) for confess alumni capabilities, providing mark plus in search work they.
IV. Evaluation and Recommendations for Mandarin Language Learning Program		
Lack in Lessons Learned	Alumni want more Lots practice speak direct with speaker original, context business in material and	Enter more Lots session conversation with speaker original and give material that focuses on business

	understanding culture Chinese and culture China	business. For preparing alumni for the world of work international.
Optimization Learning for the World of Work	Alumni propose addition studies case industry, more Lots session practice with partners business and skills communication cross culture in context international.	Learning program must covers studies case industry, more Lots practice with partners business and skills communication cross culture in context business international.

The results indicate that alumni generally perceived Mandarin as highly valuable for their careers. A majority (63%) rated themselves as competent after graduation, with speaking (49%) and writing (25%) identified as the most useful workplace skills. Mandarin was used frequently at work, with 57% employing it daily or weekly for tasks such as writing emails, negotiating, and presenting. Nearly three-quarters acknowledged Mandarin's significant influence on career advancement. Alumni also strongly supported Problem-Based Learning (82% viewing it as effective) and micro-credentials (57% believing they aid career development). Key recommendations included more practical training through simulations, case studies, and direct interaction with native speakers, alongside stronger integration of business and cultural contexts.

Following is table that summarizes data interpretation with focus on implications practical For 42 respondents' industry:

Table 5. Interpretation of data from 42 industrial respondents and practical implications

Category	Findings	Implications Practical
I. Experience and Need for Mandarin in Industry		
Importance Mandarin Skills in Industry	84% of companies consider skills Mandarin is very important or enough important.	Learning program Mandarin is a must prioritized in training employees, especially in companies that are related with partners international For increase communication cross culture.
Positions Required Mandarin Language Skills	Skills Mandarin is required for the position such as international sales and marketing, customer service, and managers project international.	Learning program must customized with need position said, in particular in communication direct with partners or client speak Mandarin.
Frequency Use of Mandarin in the World of Work	29% of companies use Mandarin every days, 36% several times a week.	Learning program Mandarin is a must covers conversation intensive business and training formal communication as well negotiation in Mandarin language.
II. Deep Chinese learning Industry Context		
Types of Tasks Required Use of Mandarin	Skills Mandarin is used For task like write report business, communication with partners business, and prepare presentation product.	Learning program must covers task - focused training practical, such as manufacturing report business, communication with partners international, and preparation presentation product.
Implementation Learning Based Problem (PBL)	43% of respondents consider PBL very effective, 36% quite effective effective in prepare employee for world of work tasks.	Learning program-based industry must integrate PBL, with tasks that involve real world scenarios, such as negotiation international and presentation product.
Benefits of Certificates Competency (Micro-Credential)	48% of respondents feel very helped with existence certificate competence in Mandarin language.	Certificate competencies (micro-credentials) will increase Power pull training program, give proof abilities that can recognized in a way professional and improve opportunity career.
III. Challenges and Support Needed in Mandarin Language Learning		
Challenge in Learning Mandarin in Industry	Challenge the biggest is lack of time For follow training and difficulties in find competent instructors.	Training program must offer flexible solutions like online learning or blended learning, and ensuring instructor own experience practical and competent.

Support Needed For Make it easier Learning	36% of respondents want more session practice speak with instructor or speaker original, and more material relevant.	Lots Learning program need enter more Lots session conversation direct with speaker original and provide customized materials with context business international.
IV. Expectations for Industry- Based Mandarin Language Learning Programs		
Expectations for the Learning Program Industry Based	The company hopes this program can provide task relevant practices, such as negotiate with client speak Mandarin.	Learning program must design with task practical, such as negotiation and creation report business, as well as understanding culture Chinese business for prepare employee Work with partners international.
Potential Benefits of Learning Based Problem (PBL)	Respondents believe PBL is effective in prepare employee with focus on the situation business real.	Integrating PBL into Mandarin language programs is highly recommended, with task-based studies case or role playing situation business real and relevant with work employee.

The findings show that 84% of companies considered Mandarin competence very important or important, especially in positions such as international sales, customer service, and project management. Nearly two-thirds of companies reported using Mandarin daily or several times a week, mainly for writing business reports, negotiations, and presentations. Respondents also valued Problem-Based Learning (79% rating it effective) and micro-credentials (48% recognizing their career value). The main challenges identified were limited training time and lack of qualified instructors, with 36% requesting more direct practice with native speakers and business-relevant materials. Overall, industry participants expected Mandarin learning programs to incorporate practical, task-based elements—such as simulations of negotiations and report writing—while also fostering cross-cultural competence to better prepare employees for international collaboration.

The findings from students, alumni, and industry respondents collectively highlight the urgent demand for Mandarin language competence in international business contexts. Among students, 92% expressed that mastering Mandarin is important for their future careers, with speaking (40%) and writing (24%) identified as the most desirable skills. Similarly, alumni emphasized the relevance of Mandarin in their workplaces, with 41% reporting frequent weekly use and nearly half acknowledging its significant impact on career advancement. The industry also consolidates this demand with 84 per cent of other business that rated Mandarin as being very important or important, especially for jobs in international sales, customer service and project management. These results compare with studies like Tian and Lowe (2018) that examined the influence of Mandarin proficiency on employability and cross-cultural negotiation effects in the context of global business, and Wu (2020) who reported on the need to integrate language education with workplace tasks as the antidote to academic-industry disconnects.

With respect to learning methodologies, the poll results indicate a significant inclination towards PBL. Overall, the majority of students (92%) and alumni (82%) perceived PBL as being effective in preparing them for real-world communication; 79% of industry respondents highlighted that it would be effective for training employees via business game simulations. These findings complement Barrows' (2002) seminal research on the effectiveness of PBL but are also consistent with more contemporary applications to language pedagogy which have demonstrated evidence that PBL

increases learner autonomy, engagement, and learners' ability to transfer newly acquired skills to real-world settings (Hmelo-Silver, 2013; Lee & Kalyuga, 2014).

Moreover, the focus on task-based learning activities (e.g. negotiations, report writing, presentations) relates to the principles of Task-Based Language Teaching (TBLT) according to Ellis (2017), which highlights the potential of authentic and goal-oriented tasks in the development of communicative competence. Through the scenarios of role-play in negotiation or business presentations in Mandarin, TBLT provides a structured mechanism to implement needs voiced by respondents.

The other key message is the acceptance of micro-credential as one product of learning Mandarin. More than half of students (52%) and alumni (57%) said that certification would make them more employable, and 48% of hiring managers agreed that it is an important consideration when making hiring decisions. This result is consistent with work elsewhere on digital micro-credentialing in higher education – where the phenomenon is perceived as a means of signalling to employers verifiable competencies and skills (Fong et al., 2016; Oliver, 2019). In learning Mandarin, micro-credentials may be helpful to align academic preparation with workplace demands in businesses involved in China-originated trade and investment.

Collectively, these findings show that the construction of an industry-specific model for learning Mandarin via PBL, TBLT and micro-credentialing is not only theoretically defensible, but is empirically-enforced by the needs and demands of different "customers". Students express their desire and need for careers, alumni notify the institution of the gap between the academic program and profession demands, and business defines clear expectations when using Mandarin in business categories. The alignment of these perspectives indicates that this study is of relevance to the development of Mandarin for Specific Purposes (MSP) pedagogy and research in the context of the growing globalisation of Chinese business practices

CONCLUSION

Conclusion should be withdrawn on the basis of research findings, formulated concerns and research purposes. Conclusion is presented in one paragraph without numerical form of expression. Explain your research contributions to science.

The suggested IBL model incorporated PBL, TBLT, and micro-credentials which aimed to provide students with linguistic and business competence which is embedded with international workplace orientation. The approach moves beyond the traditional grammar-based and theory-oriented modes of instruction by contextualizing learning to real-life scenarios and tasks, such as conducting business negotiations, report writing, and making professional presentations in Mandarin. By doing so, the course makes sure that students master the language while being able to apply it in professional environments.

By means of TBLT, learners carry out task-based exercises that resemble real work contexts. Work tasks such as writing business emails, making product presentations, and doing role-plays of negotiating, encourage learners to use Mandarin usage as a means to achieve business objectives. This method of teaching ensures that language learning is practical, applied, and always contextually based in problem solving - enabling students to improve their communicative competence and understanding of business at the same time.

By adding micro-credentials a learner's accomplishment in the programme (e.g. business speaking, professional writing, negotiation in Mandarin) is recognized in a more formal way. These credentials are evidence-based proof of ability that can be taken to potential employers, bridging the divide between what is learned at college and what is needed in industry. From an industry perspective, micro-credentials are proof positive that graduates are ready to hit the ground running in the international business environment and to students they are a competitive advantage in landing a job.

In general, the model offers a realistic, sustainable approach that reconciles higher education with its market-driven environment. By structurally integrating PBL, TBLT, and micro-credentialing within an integrated design, it provides a potential pathway for students to learn not only Mandarin but also the professional skills and industry-endorsed credential to succeed in the world of international business. This model provides insights into how Mandarin for Specific Purposes (MSP) pedagogy can be employed as a strategic instrument in the formation of globally engaged graduates.

The visual representation below describes the research findings based on the industry mediated Chinese language PBL design for business competence with micro-credential and task- based approach to language teaching.

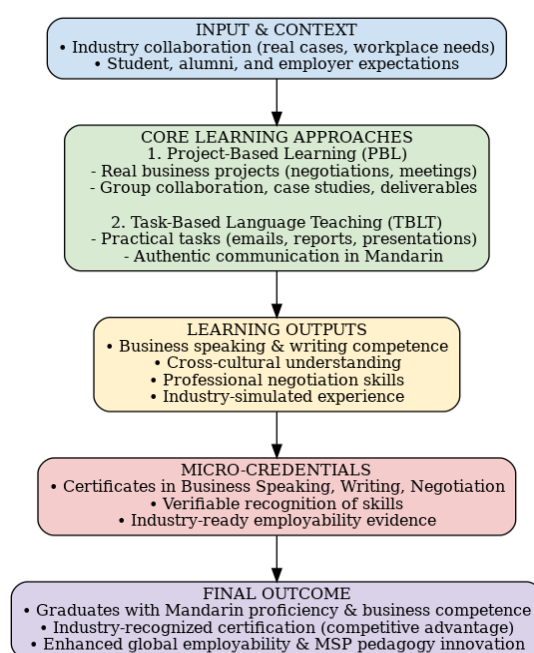


Figure 1. Industry-Based Mandarin Language PBL Design

Industry-Based Mandarin Language PBL Model The proposed Industry-Based Mandarin Language PBL Model (Figure 1) starts with the Input and Context, which is established by industry partnership, workplace demands, and stakeholders' requirements, such as students, alumni, and employers. This will help tailor the educational content to the authentic professional requirements, thus narrowing the gap between the academic training and the industry needs.

With this groundwork of knowledge, the model adapts Core Learning Approaches, which combine Project-Based Learning (PBL) with Task-Based Language Teaching (TBLT). The method encourages learners to solve real world problems – negotiating contracts, writing reports, even running simulated business meetings – while developing collaboration skills and critical thinking. TBLT, in contrast, prioritizes real-world language tasks – like writing business correspondence, reports or making presentations – that are learned by using Mandarin. These two elements combine to mean that learning is not just relevant, but actually directly applicable to professional business communication.

The model then moves toward Learning Outputs in which the individuals develop specific skills such as Mandarin for business (spoken and written), crosscultural awareness and negotiation, and simulated industry experience. Those outputs are based on the employability competences most appreciated by employers and in direct response to results obtained by the sample of students graduates and employers who participated in your study.

The framework includes the use of Micro-Credentials to formally acknowledge competencies obtained. Certifications in business speaking, professional writing, and negotiation disclose that students can back up their broad-based learning. In addition to improving job prospects, these credentials allow the industry to show specific skills appropriate to global industry needs.

The Final Outcome of the model is the production of graduates who possess both Mandarin language proficiency and advanced business competence, equipped with industry-recognized certifications. This outcome strengthens their competitiveness in the global job market and contributes to the innovation of Mandarin for Specific Purposes (MSP) pedagogy by integrating applied learning with credentialing systems.

REFERENCES

- Barrows, H. S. (2002). *Is it truly possible to have such a thing as PBL?* Distance Education, 23(1), 119–122. <https://doi.org/10.1080/01587910220124026>
- Bell, S. (2010). Project-Based Learning for the 21st Century: Skills for the Future. The Clearing House A Journal of Educational Strategies Issues and Ideas, 83(2), 39. <https://doi.org/10.1080/00098650903505415>
- Chen, S., Su, M., Wang, Y., & Zhang, C. (2023). The Application of PBL Group Learning Mode in

- Oral English Classes of Chinese Universities. *Lecture Notes in Education Psychology and Public Media*, 2(1), 941. <https://doi.org/10.54254/2753-7048/2/2022588>
- Ellis, R. (2017). *Task-based language teaching: Sorting out the misunderstandings*. *International Journal of Applied Linguistics*, 27(3), 386–404. <https://doi.org/10.1111/ijal.12218>
- Fong, J., Janzow, P., & Peck, K. (2016). *Demographic shifts in educational demand and the rise of alternative credentials*. University Professional and Continuing Education Association.
- Hmelo-Silver, C. E. (2013). *Problem-based learning: What and how do students learn?* *Educational Psychology Review*, 16(3), 235–266. <https://doi.org/10.1023/B:EDPR.0000034022.16470.f3>
- Gamage, K. A. A., & Dehideniya, S. C. P. (2025). Unlocking Career Potential: How Micro-Credentials Are Revolutionising Higher Education and Lifelong Learning. *Education Sciences*, 15(5), 525. <https://doi.org/10.3390/educsci15050525>
- Hidayati, D., Siahaan, L. H., Andriani, N., & Putri, F. M. (2024). The Enhancement of Students' Speaking Skills through Project-Based Learning in Non-Formal Education. *Journal of English Education and Teaching*, 8(3), 552–568. <https://doi.org/10.33369/jeet.8.3.552-568>
- Huang, X., & Huang, X. (2023). Putting Real Work Practice into Class: A Case Study on the Application of Project-Based Learning to Teaching English for Professional Purpose. *Frontiers in Educational Research*, 6(6). <https://doi.org/10.25236/fer.2023.060608>
- Hussein, B. (2021). Addressing Collaboration Challenges in Project-Based Learning: The Student's Perspective. *Education Sciences*, 11(8), 434. <https://doi.org/10.3390/educsci11080434>
- Imbaquingo, A., & Cárdenas, J. (2023). Project-Based Learning as a Methodology to Improve Reading and Comprehension Skills in the English Language. *Education Sciences*, 13(6), 587. <https://doi.org/10.3390/educsci13060587>
- Jiménez Rodríguez, A. F., Garcerant Meza, M. F., & Morales Pulido, V. (2024). Inspiring EFL learners: Exploring self-confidence in fostering speaking skills.
- Khansir, A. A., & Salehabadi, A. (2019). Study of Consonant Pronunciations Errors Committed by EFL Learners. *English Literature and Language Review*, 55, 48. <https://doi.org/10.32861/ellr.55.48.56>
- Kiiskilä, P., Kukkonen, A., & Pirkkalainen, H. (2023). Are Micro-Credentials Valuable for Students? Perspective on Verifiable Digital Credentials. *SN Computer Science*, 4(4).

<https://doi.org/10.1007/s42979-023-01797-y>

- Kraft, M. H. G., & Hinrichs, G. (2019). How Important Are Linguistic Competencies on the German Labour Market? a Qualitative Content Analysis of Job Advertisements. *European Journal of Economics and Business Studies*, 5(3), 35. <https://doi.org/10.26417/ejes.v5i3.p35-41>
- Lee, C. H., & Kalyuga, S. (2014). *Effectiveness of on-line problem-based learning in teaching business communication skills in English as a second language*. *Australasian Journal of Educational Technology*, 30(3), 263–275. <https://doi.org/10.14742/ajet.376>.
- Mei, Z., & Wang, A. (2023). Exploring the Characteristics of PBL Teaching Mode Analysis in Primary Education in China. *SHS Web of Conferences*, 174, 1009. <https://doi.org/10.1051/shsconf/202317401009>
- Nghia, V. N. D., & Nguyen, Q. N. (2021). Task-Based Language Teaching to Enhance Learner Communicative Competence in Vietnam: A Matter of Opinion? *International Journal of Linguistics Literature & Translation*, 3(8), 151. <https://doi.org/10.32996/ijllt.2021.4.8.22>
- Nita, A., Rozimela, Y., & Ratmanida. (2020). The Use of Task-Based Learning to Enhance Speaking Skill of Senior High School Students. <https://doi.org/10.2991/assehr.k.200819.030>
- Oliver, B. (2019). *Making micro-credentials work for learners, employers and providers*. Deakin University.
- Rahman, S., Fatmawati, F., & Pasang, K. (2025). Students' perceptions toward business mandarin (study program of mandarin for business and professional communication). *Longda Xiaokan Journal of Mandarin Learning and Teaching*, 8(1), 73-81. <https://doi.org/10.15294/longdaxiaokan.v8i1.24232>
- Sholeh, M. B., Nur, S., & Salija, K. (2020). Task Based Learning (TBL) in EFL Classroom: from theory to practice. *International Journal of Humanities and Innovation (IJHI)*, 3(4), 139. <https://doi.org/10.33750/ijhi.v3i4.97>
- Sholeh, M. B., Salija, K., & Nur, S. (2021). Task-Based Learning In English As A Foreign Language (Efl) Classroom: What, How And Why? *Getsempena English Education Journal*, 8(1), 134. <https://doi.org/10.46244/geej.v8i1.1295>
- Simões, A. V., Ribeiro, S., & Calvão, A. R. (2019). Developing Business English Communication Skills And Intercultural Competence: A Student-Centred Approach. *Edulearn Proceedings*, 1, 8417. <https://doi.org/10.21125/edulearn.2019.2096>

- Song, W. and Turner, J. (2024). Chinese heritage language learners' motivation and intention to continue learning mandarin. *Foreign Language Annals*, 58(1), 137-158. <https://doi.org/10.1111/flan.12784>
- Song, J., Mullick, J., & Tao, J. (2025). English language education in Chinese primary schools: exploring EFL teachers' attitudes, self-efficacy, and perceived school environment. *Asian-Pacific Journal of Second and Foreign Language Education*, 10(1). <https://doi.org/10.1186/s40862-025-00320-5>
- Suherman, A. (2018). A Critical Analysis of a Chapter From an EFL Textbook : a TBLT Perspective. *Voices of English Language Education Society*, 2(2). <https://doi.org/10.29408/veles.v2i2.801>
- Sun, X., & Zhu, P. (2023). Implementing Project-Based Language Teaching to Develop EFL High School Students' Key Competences. *Sustainability*, 15(2), 1658. <https://doi.org/10.3390/su15021658>
- Taylor, J. (2017). Study on the Best Uses of Technology in Support of Project-Based Learning. arXiv (Cornell University). <https://doi.org/10.48550/arxiv.1712.06034>
- Tian, X., & Lowe, J. (2018). *The role of Mandarin language skills in employability and career advancement in international business*. *Journal of International Education Research*, 14(2), 47–60. <https://doi.org/10.19030/jier.v14i2.10125>
- Thorne, K., DeMark, S., Heath, T., & Young, K. (2023). Ensuring student-centered value with skills-denominated credentials. *International Journal of Information and Learning Technology*, 40(4), 295. <https://doi.org/10.1108/ijilt-01-2023-0003>
- Wu, Y. (2020). *Linking language education with workplace needs: An industry-oriented approach to curriculum design*. *Language Learning in Higher Education*, 10(1), 95–114. <https://doi.org/10.1515/cercles-2020-2005>
- Yılık, M. A. (2021). Micro-credentials, Higher Education and Career Development: Perspectives of University Students. *DergiPark* (Istanbul University). <https://dergipark.org.tr/tr/pub/hegp/issue/67725/1031047>
- Zabidi, N. and Jamaludin, K. (2024). Pedagogical approaches for sustainable fashion design curriculum: a systematic literature review. *International Journal of Academic Research in Progressive Education and Development*, 13(1). <https://doi.org/10.6007/ijarped/v13-i1/20898>
- Zdunek, K., Dobrowolska, B., Dziurka, M., Galazzi, A., Chiappinotto, S., Palese, A., & Wells, J.

Erma Domos, et al. / Longda Xiaokan: Journal of Mandarin Learning and Teaching 8 (2) (2025)

(2024). Challenges and opportunities of micro-credentials as a new form of certification in health science education—a discussion paper [Review of Challenges and opportunities of micro-credentials as a new form of certification in health science education—a discussion paper]. BMC Medical Education, 24(1). BioMed Central. <https://doi.org/10.1186/s12909-024-06174-8>

Zhaochun, S. (2015). A Tentative Study on the Task-Based Teaching of Writing to English Majors in Chinese Settings. English Language Teaching, 8(3). <https://doi.org/10.5539/elt.v8n3p71>