

Building a Four-Dimensional Integrated Supervisory Team for Graduate Education: A Case Study of Business Administration at a Regional Chinese University

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Abstract

Graduate supervision directly affects completion, research quality, professional identity, and wellbeing. Yet many Chinese universities still ask one supervisor to cover coursework, thesis direction, methods, careers, and emotional support. This arrangement is especially hard to sustain in business administration. Academic students need methods and theory building; professional students need practical problem-solving, industry links, and career support; both need ethics and values education. One supervisor rarely covers all four areas, and regional universities feel the constraint most sharply. Here we report a reform at the School of Business Administration, University of Science and Technology Liaoning. The model organizes academic, industry, ideological-political, and administrative supervisors into a team, assigns lead responsibility by stage, and pairs a content matrix with differentiated assessment. A one-semester pilot examines feasibility and friction.

Keywords

Graduate supervision; supervisory team; business administration; four-dimensional integration.

1. Introduction

Graduate supervision is widely treated as a key determinant of timely completion, research quality, and professional identity. Many Chinese universities nevertheless retain a single-supervisor model in which one teacher carries coursework, thesis, methods, career, and emotional support. The model can work when discipline and methods align, but it strains in business administration. Academic-track students need research methods, theory building, and thesis writing. Professional-track students, including MBAs, need applied problem-solving, industry links, and career development. Both groups also need research integrity, professional ethics, and values education.

Regional universities face greater pressure. Teaching loads are heavy, colleagues are fewer, enterprise ties are less stable, and dedicated support offices are limited. Even a strong supervisor in one area cannot hold every resource at once. Simply transplanting a supervisory committee from a well-resourced university is not realistic. This paper reports a four-dimensional supervisory team reform for regional universities and explains its logic, operation, pilot evidence, and unresolved issues.

2. Problem and Design Requirements

Research on co-supervision identifies broader expertise, more frequent feedback, continuity, and cover during absence, alongside conflicting advice, diffuse responsibility, and coordination

costs [1]. Cohort supervision reduces isolation and creates peer communities, which matters for students working on individual projects rather than in laboratory teams [2]. Studies of students suggest shared supervision works best when roles and expectations are visible in everyday practice [3]. Supervisors also gain confidence through collaboration, particularly by learning from experienced colleagues [4]. Teaching narratives from supervisors offer usable models for designing those mechanisms [5].

Professional degrees add another layer. Industry supervisors are widely promoted, yet involvement often stops at lectures, visits, or thesis review. Supporting employability requires structured work-integrated learning embedded in training, not occasional contact [6]. Role ambiguity is a recurring problem. Academic supervisors may treat industry mentors as guests; mentors may not know what authority or time they should commit; students may not know whom to ask. Existing team models often assume ample resources and rarely specify how ideological-political and administrative roles contribute to training.

Further evidence shows why support matters. A meta-analysis of Chinese graduate students links academic, personal, and autonomy support with creativity [7]. Mentor-team support helps students convert research pressure into motivation rather than avoidance [8]. Supervisor support may also influence research creativity through self-efficacy and engagement [9]. Team design therefore cannot rely on adding people; it needs clear channels for support, responsibility, and feedback.

Three requirements follow. The team should be small enough to coordinate and broad enough to cover academic, practical, ethical, and procedural needs. Responsibilities must be explicit because ambiguity is the main failure point in co-supervision. Assessment should use differentiated indicators, not a single research standard for all roles.

3. How the Team Operates

Each team has four roles. The academic supervisor convenes the team and leads research training. The industry supervisor connects students to enterprise problems, data, and career networks. The ideological-political supervisor handles values, professional ethics, social responsibility, and wellbeing. The administrative supervisor manages programme requirements, documentation, scheduling, and non-academic matters. Composition adjusts to student type: academic-track students may add a methods co-supervisor, professional students may add industry mentors, and interdisciplinary projects may add faculty from another field.

Selection criteria also differ by role. Academic supervisors need recent research activity and successful supervision experience. Industry supervisors need at least five years of relevant management experience and a willingness to commit defined time. Ideological-political supervisors need student-affairs experience, with counselling or career guidance training preferred. Administrative supervisors need familiarity with graduate regulations and coordination ability. Appointment follows application, qualification review, school evaluation, and a three-year public appointment. Annual review, rectification periods, and student-initiated change prevent poor matches from hardening and keep the team from becoming a token label.

Selection and review matter because a supervisory team inherits the risks of any collaboration. If an industry mentor only attends one meeting, students may see the role as symbolic. If an administrative supervisor is added without clear authority, procedural questions still return to the academic supervisor. The pilot therefore treated role definition as something to be tested, not assumed. The annual review asked whether each role had actually changed a student's support, not simply whether meetings had been held.

Responsibility rotates by stage. In the adaptation stage, administrative and ideological-political supervisors lead induction, programme explanation, and initial conversations, while the

academic supervisor helps students see possible directions. In core training, academic and industry supervisors jointly lead topic selection and framing of enterprise problems. In the output stage, the academic supervisor leads thesis quality and method, while the industry supervisor supplies data, contextual validation, and practical feedback. In transition, industry and ideological-political supervisors emphasize employment, professional identity, and work ethics. This division keeps participation broad without making responsibility vague.

A content matrix covers four areas: academic, practical, values, and career development. Values education is not isolated in a separate block. Industry mentors raise ethical issues through enterprise cases, such as whether a marketing plan accounts for vulnerable groups or environmental effects. Academic supervisors discuss data use, authorship, and research integrity within thesis work. Ideological-political supervisors connect concrete cases to wider social responsibility and value frameworks. Administrative supervisors reduce uncertainty by explaining procedures. Assessment combines process records, outcomes, and satisfaction and applies different weights by role: academic supervisors on research and thesis quality, industry supervisors on practical outcomes and employment, ideological-political supervisors on value formation, and administrative supervisors on service quality.

The four roles do not carry equal weight throughout a student's programme. Early on, administrative clarity matters more than research output. Later, methods and industry validation become central. The team therefore needs to shift emphasis, not merely meet more often. The stage-based design addresses this by naming who leads at each point.

The matrix also helps prevent overlap. When every supervisor talks about everything, students receive mixed messages and none of the conversations goes deep. Separating domains does not mean isolating them. An enterprise case can carry an ethical question; a thesis can carry a professional development conversation. The design keeps the domains connected but distinct. The matrix is not a form to fill in. It is a planning tool. Before each stage, the team can ask which domain needs attention next and who will lead it. After each stage, the same record shows whether the student received support or only attended meetings.

4. Evidence

The pilot involved about 40 business administration master's students, ten academic supervisors, and ten industry supervisors from steel, port logistics, and financial firms. A mid-semester survey collected 36 student responses (90% response rate). Seventy-eight per cent agreed that the team gave broader support than a single supervisor; 69% felt less isolated; 64% considered industry involvement made topics more realistic. Yet 28% found coordination confusing, and 19% were unsure whom to approach. The model did widen support, but communication rules still needed strengthening.

In the supervisor survey (n=16; 82% response rate), 71% of academic supervisors felt their workload had fallen, and 64% learned from collaboration. Among industry supervisors, 83% found the role meaningful, but 50% reported insufficient time. Process indicators show 85% of teams held the fortnightly academic meetings, 72% held monthly industry guidance, and ideological-political education reached 90% coverage. High coverage reflects its placement as a formal course session rather than an optional activity.

Three findings stand out. Industry mentors moved thesis topics toward enterprise issues such as distribution optimization in a regional steel firm, employee motivation in port logistics, or process improvement in financial services. These topics are not necessarily more theoretical, but they are closer to reality and easier for students to sustain. One ideological-political supervisor identified thesis anxiety that the academic supervisor had earlier misread as laziness and helped the student contact counselling. Administrative supervisors handled scheduling, scholarships, and defence procedures, freeing academic time. The evidence remains

formative: there is no control group, value outcomes rely on self-report, and long-term effects are unknown.

Students do not object to multiple supervisors; they object to unclear responsibility. A problem list and handover record formed later in the semester helped students know whom to approach first for thesis, internship, or wellbeing issues, after which the team referred internally. The next step is to turn this process into templates for meeting records, referrals, and stage handovers.

Administrative coordination may look minor, but it affects academic work. When scholarship deadlines, defence schedules, and enrollment records are handled well, students spend less time chasing paperwork and more time on research. Academic supervisors also avoid becoming the default contact for every procedural question.

When the communication loop is not explicit, the team can create noise. Some students tried to contact every supervisor for every issue, which increased confusion and meeting load. Others waited because they were unsure whom to approach. A simple routing rule proved more useful than adding another meeting: academic issues go to the academic supervisor, enterprise data to the industry supervisor, procedures to administration, and wellbeing to the ideological-political supervisor.

Clear routing also reduces the chance that a student receives three versions of the same advice and none of them is followed up.

5. Discussion and Conclusion

The model runs on what is already there rather than assuming a large faculty or new full-time posts. It embeds values education in academic, industry, and administrative routines so that it is not a separate lecture. Rotating lead roles and differentiated assessment make responsibility visible. Compared with a dual-supervisor system, it broadens function; compared with cohort models, it retains individual supervision as the core and uses the team as supplement [2]. Team-mode research also cautions attention to how power and responsibility are distributed [10].

Three tensions remain. Role coordination needs clearer communication rules, otherwise students move repeatedly between supervisors. Industry supervisors have limited time, so contributions should concentrate on topic selection, data, and career feedback. Value measurement still relies on observation and self-report, and stronger process evidence is needed. The project will expand the pilot, refine tools, and test thesis quality and employment outcomes across cohorts.

More supervisors do not automatically produce better outcomes. It argues that support has to be structured. A team without explicit roles may create more confusion than one good supervisor. The pilot treats role clarity as a condition of effectiveness, not as an administrative detail.

Regional universities cannot rely on abundant staff, so the model has to be cheap to run. It reuses existing faculty, enterprise partnerships, and administrative staff. It does not require a new office or an external platform. This makes it easier to test and easier to abandon if it does not work, which is useful in an early-stage reform.

Team supervision is not simply a matter of adding people. It requires redesigned roles, stage-based responsibility, and support pathways that students can understand. Only when “who is responsible for what, when” is clear can a four-dimensional team become a support system rather than a new coordination burden imposed on students and supervisors alike.

Acknowledgement

This research is supported by the 2025 Postgraduate Education Reform and Innovation Project of University of Science and Technology Liaoning (Grant No. 2025YJSCX12).

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