Proceedings of Business and Economic Studies, 2026, Volume 9, Issue 10
https://bbwpublisher.com/journal/PBES
Online ISSN: 2209-265X
Print ISSN: 2209-2641

Student Team Support for Farmers' Participation in E-Commerce: Task Allocation and Reflections on Practice

Sirong Wen[1], Xuyang Liu[1]*, Yongpei Chen[2], Zijun Deng[3]

[1]Guangzhou Xinhua University, Guangzhou, Guangdong, China
[2]Shanghai Institute of Technology, Shanghai, China
[3]Guangzhou Huashang Vocational College, Guangzhou, Guangdong, China

Author to whom correspondence should be addressed.

Copyright: © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: Student-supported e-commerce projects depend on how online work is shared and how long students can sustain their involvement. This practice-based case analysis examines the Qingxi Sannong–Hongse Zhumeng project using existing project documents and a faculty advisor's retrospective account compiled during manuscript preparation. Students managed product listings, processed orders, and produced promotional content. Farmers supplied, packed, and shipped products, while a partner enterprise provided technical support. Routine online work remained largely with students after platform training. The team also reported difficulty sustaining its involvement because operational work conflicted with academic commitments. The case illustrates farmers' participation through supply and order fulfillment, even when they do not manage the online storefront themselves. It also shows why training content needs to be considered separately from the responsibilities participants actually assume. The resulting recommendations concern confirmation of supply information, training suited to current tasks and future participation, and arrangements for covering essential work when students are unavailable. These are practical proposals; the available evidence does not establish their effects on training outcomes or business performance.

Keywords: Student team support; Farmers' e-commerce participation; Task allocation; Operational continuity; Reflective practice

Online publication: November 16, 2026

1. Introduction

Selling agricultural products online requires ongoing work: preparing product information, managing the storefront, processing orders, communicating with suppliers, and arranging shipping. When farmers and online storefront operators are different actors, participation in e-commerce depends in part on how they divide these tasks. Understanding such arrangements requires attention both to the work farmers undertake and to who

manages online operations and connects the different stages of a transaction.

Projects in which students support farmers bring these questions into focus. Students can manage the platform and create promotional content, while farmers contribute their production and supply experience. Yet opening an online sales channel does not settle who will handle its daily work or how training will relate to that work. Students have academic commitments, and farmers organize their time around production. Project organizers must therefore consider how responsibilities fit each group's availability and how routine operations can be maintained.

Cooperatives and agricultural service providers offer one way for smallholders to participate in digital agriculture without performing every digital task themselves [1]. Agricultural intermediaries also use digital tools to exchange information and coordinate markets [2]. For farmers using advisory services, readiness involves capabilities, opportunities, and motivations [3]. These accounts concern different forms of support. The present case asks how such questions apply when the people managing an online storefront are students whose academic work also demands their time.

The Qingxi Sannong–Hongse Zhumeng project provides the setting for this examination. We use project materials and a faculty advisor's retrospective account to describe how students, farmers, and a partner enterprise shared the work. The analysis asks how farmers participated through that division of tasks, what responsibilities they held after platform training, and what constrained the students' continued involvement. The discussion then considers what project organizers could learn from the arrangement. With no systematic assessment of learning or business outcomes, the paper offers a practice-based case analysis rather than an evaluation of project performance.

2. Related research and analytical perspectives

The literature is used here to interpret the division of work described in the project materials. It helps distinguish participation from independent platform use and training from the responsibilities assigned after it. Research on the provision of digital services also offers a basis for examining the work required of the student team.

2.1. External support and farmers' digital participation

A farmer's use of a platform reveals only part of the work involved in an online sale. Product information has to reach the storefront, and an order must reach someone who can supply and ship it. Klerkx *et al.*'s review [4] placed agricultural labor and skills among the concerns of social science research on digital agriculture, alongside knowledge and innovation systems and the management of digitalized value chains. For this paper, the relevance of that broader view is its attention to the people and work behind the technology.

Xie *et al.* [1] provided a closer point of comparison through their account of smallholders' indirect participation in digital agriculture. Cooperatives and outsourced agricultural services can undertake tasks that individual farmers do not perform themselves. Baumüller *et al.* [2] examined a different relationship: agricultural intermediaries' use of digital tools and market networks. Their work concerns information exchange and coordination among market actors. These studies help frame the distinction between operating a digital service and participating in the transactions it supports.

That distinction matters when students manage a storefront on farmers' behalf. The relevant unit of description is the work needed to complete an order, including the farmer's contribution away from the screen. The case analysis accordingly follows responsibility for product listings, order communication, supply, and

shipping. This use of the literature does not assume that student teams function in the same way as cooperatives or commercial intermediaries; it draws on those studies to identify which responsibilities need to be described.

2.2. Training content and actual responsibilities

Training records can establish what was taught. They cannot, on their own, establish whether a farmer can perform an operation or has taken responsibility for doing so. McCampbell *et al.* [3] approached readiness for digital agricultural advice through capabilities, opportunities, and motivations. Their distinction is useful because it leaves room for someone to have a skill without having the opportunity or reason to use it. Abdulai *et al.* [5] examined associations between participation in digital services and organizational connections, service access, and conditions of mobile phone use. Their findings also place participation in a context broader than instruction alone.

Abdulai's social practice account [6] related digital tools to materials, competencies, and meanings. Read in relation to this project, it raises a question about the place of online operations in farmers' existing work. Knowing how to list a product and being responsible for maintaining a listing are different matters. Production commitments and the availability of student assistance are therefore relevant to interpreting task allocation, although their importance to individual farmers would have to be established directly with those farmers.

We retain this distinction when discussing training. The account can describe the platform functions covered and the division of work that was reported afterward. It cannot show that the training failed because students continued to run the storefront. Nor would participation in training, by itself, demonstrate competence. A judgment about learning would require evidence of what participants could do, separately from an account of who normally did the work.

2.3. Conditions affecting support providers' involvement

Digital support has its own staffing and resource requirements. Wagg and Simeonova [7] discussed funding, local resources, and the skills of intermediary personnel in rural digital inclusion services. Tups and Matejcek [8] examined the labor involved in establishing and maintaining digital connectivity. Emeana *et al.*'s review of mobile agricultural services [9] addressed sustainability in relation to user needs, conditions of use, and long-term funding. Across these different settings, the provision of a service entails work that continues after the technology becomes available.

In the present project, that continuing work includes maintaining product information, handling orders, and preparing promotional content. The practical concern is who has time to do it. A student team can provide assistance at one stage without being able to maintain the same commitment indefinitely. We therefore consider the team's reported time pressures in relation to the responsibilities it held. The literature informs this question about continued support; it does not establish how often operations were disrupted in this project or what consequences followed.

3. Project background and sources

The Qingxi Sannong–Hongse Zhumeng project used the Huinong Puzi mini-program to sell agricultural products online and undertook short-video promotion, livestreaming, and training in platform operations. According to the faculty advisor's retrospective account, the farmers who supplied products were mainly from Ganxian District, Ganzhou, Jiangxi Province, China. Students primarily managed online operations, while

farmers supplied, packed, and shipped products.

The advisor's account dates the start of this particular arrangement, with students processing orders and farmers supplying and shipping products, to approximately May 2024. Around four to five students took part in routine operations over time; this figure does not indicate how many worked simultaneously. May 2024 refers to the start of the described task allocation, not necessarily the project's first transaction. According to student reports relayed to the advisor, a farmers' cooperative helped establish contact with suppliers, and students agreed on arrangements with farmers verbally or through WeChat.

The sources comprise an existing business plan, a presentation prepared for a competition final, and the faculty advisor's retrospective account compiled during manuscript preparation. The business plan's cover is dated November 20, 2023; the presentation gives no date of completion. Prepared for planning and competition purposes, these documents describe platform features, collaboration, and planned or reported activities. Plans are distinguished from accounts of activities that took place. Aggregate figures for training and beneficiaries are excluded because their scope could not be established.

One author also served as the project's faculty advisor. The retrospective account has been organized statement by statement, distinguishing direct observation, information reported by students, and accounts in which the two cannot yet be separated. The advisor directly observed short-video and livestreaming activities and students' involvement in production, on-camera presentation, and explanation. Information about cooperative involvement, specific enterprise support, and conflicts over students' time primarily came from student reports. Descriptions of training content and everyday responsibilities following training combine the advisor's knowledge with student reports; these components cannot currently be separated.

These materials are used to describe responsibilities, compare training content with work arrangements, and consider the conditions needed to sustain student support. They were not collected through formal interviews or systematic observation, and all concern the same project team. The analysis identifies the source of each account where possible and limits its interpretation accordingly. Agreement between materials from this shared setting is not treated as independent verification.

4. Task allocation and collaborative practice

The case is presented through three aspects of the collaboration: the division of online and offline work, responsibilities following training, and students' reported difficulties in sustaining operations.

4.1. Connecting online operations with product supply

According to the faculty advisor's retrospective account, students were mainly responsible for product listings and order processing, and passed order information to farmers. Farmers undertook production, supply, packing, and shipping. They participated in online transactions by receiving order information and fulfilling supply and shipping responsibilities, while students handled most routine storefront operations.

The partner enterprise provided technical support. Students reported that this included mini-program maintenance, troubleshooting, and guidance on using the administration interface. These functions differed from students' daily operational work: the enterprise addressed technical issues, while students dealt with individual products and orders.

Students also created promotional content. The advisor observed short-video and livestreaming activities in which students were mainly responsible for production, appearing on camera, and presenting information.

Students reported that the content showed production settings and harvesting or production processes. Their contribution thus extended beyond storefront management to presenting the origins and production of the goods sold.

This division of work linked online product information and orders to farmers' supply activities. Farmers contributed to fulfilling transactions even though they did not manage all platform functions. Their participation is therefore visible in the supply and shipping work that supported online sales, as well as in any direct use of the platform.

4.2. Platform training alongside established responsibilities

The faculty advisor's retrospective account, combining personal knowledge and student reports, indicates that the project provided training in registration, product listing, and viewing and processing orders. The content primarily concerned online storefront operations.

The same account indicates that students continued to handle most routine online work after training, while farmers focused on production, packing, and shipping. This describes the division of work at the project level. It does not track changes in the responsibilities of individual farmers before and after training.

The advisor's account attributes farmers' limited involvement in online work partly to the time they devoted to production and shipping. This explanation has not been checked directly with farmers. It offers a possible way to understand the work arrangement, but cannot establish farmers' operational skills or willingness to take on online tasks.

Training and student-managed online operations therefore existed alongside one another. For project organizers, the practical question is how instruction in platform functions relates to the work farmers currently undertake and the responsibilities they may wish to assume.

4.3. Difficulties reported by the student team

Students told the faculty advisor that operational work conflicted with their academic commitments and was difficult to sustain. The account does not specify when or how often these difficulties arose, or which tasks were affected. It supports a description of reported time pressures, but provides no basis for claiming order delays, interrupted promotion, or lost sales.

Students' responsibilities included product listings, order processing, and content creation. The enterprise's technical support and farmers' supply work did not, by themselves, show that someone else could cover these online tasks. The reported time pressures therefore raise a practical concern about who would handle essential work when students were unavailable and what information that person would need.

The available materials do not establish whether backup staffing, rotations, or handovers were arranged. These remain issues for project management to clarify, rather than documented failures of the project.

5. Reflections on practice and management implications

The case leaves several decisions for project organizers to consider. Students undertook most online work, but farmers still supplied and shipped the products. Training had taken place without a reported transfer of routine storefront management, and students described difficulty maintaining their involvement. The following discussion develops proposals from those circumstances; none has been tested for effectiveness in this project.

5.1. Confirming supply within a shared workflow

An order reached the farmer through the student team, according to the advisor's account. This arrangement made students the link between the storefront and supply, while the farmer remained responsible for preparing and sending the goods. Xie *et al.*'s discussion of indirect participation [1] helped interpret the farmer's role within this division of work. Baumüller *et al.*'s analysis of market coordination [2] added a concern about how information passes between the parties. For this case, the managerial issue is the information that students need from farmers before they can confirm an order to a buyer.

A workable procedure could begin with confirmation of the quantity available and the expected shipping time. Students could use those details to update the storefront and communicate with buyers. An order sent to a farmer could specify the product, quantity, and delivery details, with any uncertainty stated explicitly. The farmer could then confirm supply and send shipment information once the goods have left. This proposal uses the existing division of work as its starting point; it does not presume that the current arrangements caused errors or delays.

The point is to make confirmation part of the workflow, rather than leave students to infer supply conditions. Verbal or WeChat-based coordination was reported in this project, so a comparable team might use the same communication channels to record the essential details. A brief, agreed record may be more manageable than an elaborate reporting system. Its usefulness would depend on both parties keeping it current and knowing which details still required confirmation. Farmers would retain a role in transaction decisions even when students entered the information on the platform.

5.2. Relating training to the work farmers undertake

The training covered registration, product listing, and viewing and processing orders. The reported division of work afterward placed most of these operations with students. That difference does not tell us what individual farmers learned. It does, however, leave project organizers with a choice about the purpose of further training: supporting farmers in the supply tasks they already perform, preparing them for additional online responsibilities, or offering both routes according to their circumstances.

McCampbell *et al.*'s treatment of readiness [3] is useful at this point because it separates capability from opportunity and motivation. Abdulai's social practice perspective [6] also directs attention to how digital operations fit into existing work. These perspectives suggest starting with the farmer's intended responsibilities. Someone who wishes to continue supplying and shipping goods may need guidance on confirming order details and communicating changes in availability. Someone interested in managing listings would need opportunities to practice those operations and discuss when responsibility could be transferred.

The project account cannot establish which option farmers would prefer. The explanation that they were occupied with production and shipping comes through the advisor's retrospective account and has not been checked directly with them. A future training plan should therefore begin by asking farmers which tasks they want to undertake and what time and equipment they can use. Current task allocation should not become a permanent assumption about their ability or interest. Equally, attendance at another session should not automatically result in assigning them responsibility for online orders.

Keeping separate records would help organizers make these decisions. A session record would show the content taught; a short practical exercise could show which operations a participant could complete; a task record would identify who subsequently handled the work. These records answer different questions. Taken together over time, they could support changes to training and responsibilities without using session counts

as a substitute for evidence of learning. This is a proposal for future practice, not a description of assessments already undertaken in the project.

5.3. Arranging cover for essential online work

The team's report of conflict with academic work raises a staffing question. Technical assistance from the enterprise covered maintenance, troubleshooting, and guidance on the administration interface. It does not establish that the enterprise was available to process orders when students were busy. Wagg and Simeonova [7] and Tups and Matejcek [8] helped place this distinction in a wider discussion of the resources and labor needed to sustain digital support. In a student project, the people maintaining the software and the people handling everyday transactions may have different responsibilities.

Planning could begin with orders already accepted. A named team member would need to know which orders still required supplier confirmation or shipping updates, and who could take over if that member became unavailable. New videos or livestreams could be scheduled around the remaining time. Their preparation differs from attending to an outstanding order, whose buyer and supplier may already be waiting for information. This distinction provides a reason to prioritize some tasks when availability is limited, without assuming that delays occurred in the present case.

Around four to five students participated over time, but the account does not establish simultaneous staffing. It would therefore be premature to prescribe a fixed rotation for this team. Comparable projects could first identify who is available during different parts of the academic calendar, then agree on cover for essential tasks. A handover could record supplier contacts, pending orders, and unresolved questions, together with the platform access permissions the replacement needs. Where no cover is possible, the team would need to review its schedule and the commitments it can reasonably make.

These arrangements would still depend on the willingness and availability of the people involved. A short handover record cannot compensate for having no one to undertake the work. Its purpose is narrower: to make ongoing responsibilities visible when personnel change. The case supports examining that problem, while the absence of continuous operating records prevents a judgment about whether any particular staffing arrangement would have resolved the reported difficulties.

6. Conclusion and limitations

The Qingxi Sannong–Hongse Zhumeng case illustrates a form of e-commerce participation based on shared responsibilities. Students managed online operations and created promotional content, farmers supplied and shipped products, and the enterprise provided technical support. Farmers' contribution lay in helping fulfill transactions, even though they did not independently manage the storefront.

Training in platform operations was followed by a work arrangement in which students still handled most online tasks. This finding describes task allocation; it does not measure what farmers learned. Students also reported that academic commitments made continued involvement difficult. Together, these observations draw attention to the fit between training and assigned work, and to the time available for maintaining that work.

The case contributes a practical account of how student support connects farmers to online transactions. It directs attention to responsibilities that may be missed if participation is assessed only through independent platform use. For project organizers, the recommendations focus on confirming supply information before making commitments to buyers, relating training to current and possible future tasks, and preparing for changes

in students' availability.

The analysis is limited to a single project, and its relevance to other settings depends on their resources and collaborative arrangements. The sources consist mainly of project documents and a faculty advisor's retrospective account prepared during manuscript development. Without systematic interviews with farmers and partners, the analysis remains dependent on the project team's perspective and is vulnerable to recall bias. Some statements also combine observation and student reports that cannot be separated. The end of the operating period and the current operational status remain unconfirmed. No assessments of operational competence, continuous operating records, or income data are available, so the paper cannot evaluate training effectiveness, financial returns, or the consequences of reported time pressures.

Future projects could keep brief records of task allocation and handovers and seek direct feedback from farmers and students when revising work arrangements. Such records would make it easier to examine how responsibilities change over time. Comparative research could then assess whether similar arrangements work differently with other types of support providers or in other local settings.

Funding

This work was supported by a provincial-level project under the 2024 College Student Innovation and Entrepreneurship Training Program at Guangzhou Xinhua University (Project No. 202413902042X).

Disclosure statement

The authors declare no conflict of interest.

References

[1] Xie L, Luo B, Zhong W, 2021, How Are Smallholder Farmers Involved in Digital Agriculture in Developing Countries: A Case Study from China. Land, 10(3): 245. doi:10.3390/land10030245.

[2] Baumüller H, Ikpi U, Jumpah ET, et al., 2023, Building Digital Bridges in African Value Chains: Exploring Linkages between ICT Use and Social Capital in Agricultural Marketing. Journal of Rural Studies, 100: 103002. doi:10.1016/j.jrurstud.2023.03.010.

[3] McCampbell M, Adewopo J, Klerkx L, et al., 2023, Are Farmers Ready to Use Phone-Based Digital Tools for Agronomic Advice? Ex-Ante User Readiness Assessment Using the Case of Rwandan Banana Farmers. The Journal of Agricultural Education and Extension, 29(1): 29–51. doi:10.1080/1389224X.2021.1984955.

[4] Klerkx L, Jakku E, Labarthe P, 2019, A Review of Social Science on Digital Agriculture, Smart Farming and Agriculture 4.0: New Contributions and a Future Research Agenda. NJAS–Wageningen Journal of Life Sciences, 90–91: 100315. doi:10.1016/j.njas.2019.100315.

[5] Abdulai A-R, KC KB, Fraser E, 2023, What Factors Influence the Likelihood of Rural Farmer Participation in Digital Agricultural Services? Experience from Smallholder Digitalization in Northern Ghana. Outlook on Agriculture, 52(1): 57–66. doi:10.1177/00307270221144641.

[6] Abdulai A-R, 2022, Toward Digitalization Futures in Smallholder Farming Systems in Sub-Sahara Africa: A Social Practice Proposal. Frontiers in Sustainable Food Systems, 6: 866331. doi:10.3389/fsufs.2022.866331.

[7] Wagg S, Simeonova B, 2022, A Policy-Level Perspective to Tackle Rural Digital Inclusion. Information Technology

& People, 35(7): 1884–1911. doi:10.1108/ITP-01-2020-0047.

[8] Tups G, Matejcek A, 2026, Planning Smart, Working Hard: Unveiling the 'Hidden' Labour Behind Digital Connectivity in Tanzanian Agriculture. Territory, Politics, Governance, 14(2): 224–243. doi:10.1080/21622671.2025.2504968.

[9] Emeana EM, Trenchard L, Dehnen-Schmutz K, 2020, The Revolution of Mobile Phone-Enabled Services for Agricultural Development (m-Agri Services) in Africa: The Challenges for Sustainability. Sustainability, 12(2): 485. doi:10.3390/su12020485.

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.