



Development and Practice of Consolidated Financial Statements Teaching Case

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Abstract. The consolidated financial statements account for more than half of the course content of "Advanced Financial Accounting", and is the most difficult part of the course. In previous teaching, students have difficulties in learning, such as forgetting what they learned before, and only seeing the trees but not the forest. In order to solve teaching difficulties, after discussion, the content of this chapter is designed as a teaching training case, integrating related knowledge of law and taxation, and using modern information technology conduct training, which makes students active, inspires interest, and enhances application, becoming an effective means to solve these problems.

Keywords: Teaching case, Consolidated statement, Strategy, Design

1 Introduction

The course "Advanced Financial Accounting" lasts for 54 periods and is offered in the second year for students major in accounting or in the third year for students majoring in auditing. The prerequisite courses are "Basic Accounting" and "Intermediate Financial Accounting". Taking into account the opinions of teachers and students, the teaching team has selected the most frequently occurring economic events in accounting practice as the teaching content of this course including business combination accounting, foreign currency accounting, lease accounting, and stock-based payment accounting. Among these, business combination accounting accounts for 50%-60 of the course in terms of teaching hours and final exam scores. While case-based teaching is a method advocated by modern student-centered teaching philosophy, we select combination accounting as the teaching content for comprehensive teaching case is a necessary measure to strengthen students' learning ability and improve their practical application level in this course.

2 Teaching Case Design Strategies Based on Learning Situation Analysis

By investigating students' learning performance in the chapter of "Consolidated Financial Statements", it is proved that the design and application of comprehensive teaching cases necessary, and provides an objective for the design of teaching cases^[1].

2.1 Teaching Case Solves the Problem of Students' Fear of Learning

There are many knowledge points in consolidated financial statements, moreover, it is related to the difficult content in the previous course "Intermediate Financial" which are knowledge that students have not mastered before. Students find even more difficult, and some of them have even given up learning.

Consolidated financial statements comprehensive case, covering more than 90% of the knowledge points of consolidated statements as shown in Figure 1 and combining the application of the "Company Law", "Tax Law" and modern financial tools, to restore the real tasks involved in practice, to cultivate the ability comprehensive knowledge application and value goals. By letting students practice, they can learn by doing and develop interest in doing, and the implementation of the consolidated statements comprehensive case achieve the purpose of promoting learning by doing.

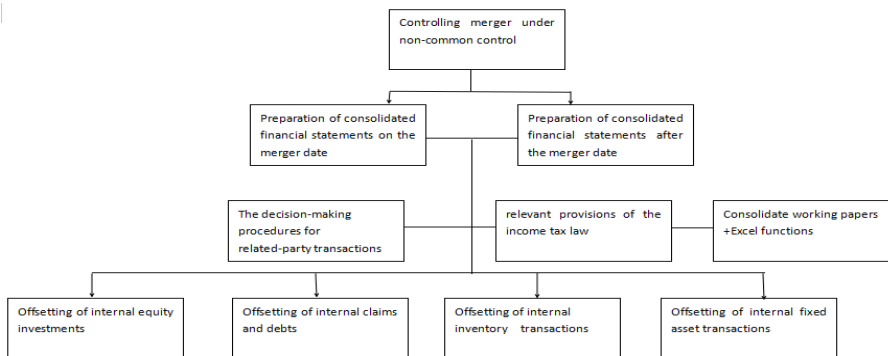


Fig. 1. Knowledge points involved in the comprehensive teaching case

2.2 The Comprehensive Teaching Case Allows Dispersed Knowledge Points to Form a Knowledge Surface

From the perspective of students' learning situation, even for students who perform well, they only master certain knowledge points well, without connecting points together or paying attention to the relationships between them. Students need to understand method from the perspective of the entire process and framework of consolidated financial statements, rather than just a single knowledge point^[2]. Therefore, the teaching case provides a comprehensive training connects knowledge points together,

enabling students to understand why they are doing it, what results they should get, and how to make the financial statement data more objective.

2.3 Comprehensive Teaching Cases Achieve the Practical Application of Multi-disciplinary Knowledge

Students tend to overlook the comprehensive application of multi-disciplinary knowledge in consolidated financial statements and the cultivation of professional responsibility. By introducing tax law, economic law, and company law to manage the behavior of financial personnel, it is a requirement the state for the construction of modern course ideology and politics, and also a requirement for talent cultivation in the new era.

2.4 The Comprehensive Teaching Case Should Improve Students' Ability to Use Modern Information Technology to Solve Accounting Problems

Accounting personnel with transformed functions are no longer limited to mastering the application of various software, but must also possess the initiative in financial management be able to propose software solutions to problems, design information-based processes, and put forward information-based design plans. However, students' ability and awareness of actively raising and seeking out tools to solve them is still lacking. In the comprehensive teaching case-based training, students are required to independently Excel formulas, fully leveraging the functions of Excel in consolidating statements, calculations, and preparing reports, to cultivate students' ability to use information-based tools.

3 Design of Teaching Cases

3.1 The Business Context and Data Involved in the Teaching Case

Based on the real business of corporate mergers, the conditions are simplified, and the two parties to the merger, Aimee Company and Company, which have no related party relationship, are set up. The merger is carried out by issuing equity securities as consideration, and 70% controlling equity the other party is obtained. The case sets up the fair value of the merger consideration, the financial statements of the two parties before the merger, the individual financial of the first year after the merger, and the data of related party transactions between the two parties. Based on these data, students fill in the merger working papers carry out the offsetting treatment of related party transactions in the operation area.

The data in the consolidation working paper (as shown in Figure 3) comes from the adjusting and offsetting entries, and is automatically populated., if errors occur, they may cause the accounting equation in the consolidation working paper to be out of balance.

Consolidated Financial Statements Working Papers for 2022						
Project	Individual Report		Total	Adjusting and offsetting entries		Merge number
	Aimee Company	Bond Company		Debit	Credit	
Balance Sheet Items						
Monetary Funds	1430.75	325,705	1756.455			1756.455
Accounts Receivable	500	56	556	#N/A	#N/A	#N/A
Inventory	743	170	913	#N/A	#N/A	#N/A
Other Receivables	7	0	7		#N/A	#N/A
Trading Financial Assets	800	0	800			800
Long-term Equity Investments	500	0	500	#N/A	#N/A	#N/A
Fixed Assets	2200	320	2520	#N/A	#N/A	#N/A
			0	#N/A	#N/A	
Goodwill			0	#N/A		#N/A
Deferred Tax Assets	5.25	1.295	6.545	#N/A	#N/A	#N/A
			0	#N/A		
Total Assets	6186	873	7059			#N/A
Short-term Loans	400	150	550			550
Accounts Payable	300	135	435	#N/A		#N/A

Fig. 3. Operation diagram of merging working papers

3.2.4 Complete the Consolidated Balance Sheet and Consolidated Income Statement.

The consolidated balance sheet and the consolidated income statement (Figure 4) are also automatically populated, and most errors will cause an imbalance in the accounting, so errors can be detected in time.

Consolidated Balance Sheet for 2022						Consolidated Profit Statement for 2022		
Assets	Ending Balance	Last year's ending balance (omitted)	Liabilities and Owner's Equity	Ending Balance	Last year's ending balance (omitted)	Project	Amount of last period (omitted)	Amount of this period
Current Assets:			Current Liabilities:			1. Operating Revenue		#N/A
Cash and Cash Equivalents	1756.455		Short-term Loans	550		Shrctact:		#N/A
Accounts Receivable	#N/A		Accounts Payable	#N/A		Operating Cost		#N/A
Inventory	#N/A		Other payables	#N/A		Taxes and		
Other Receivables	#N/A		Total Current Liabilities	#N/A		Surcharges		819
Trading Financial Assets	800		Non-current Liabilities:			Expenses		345
Total Current Assets	#N/A		Long-term Loans	1008		Administrative Expenses		#N/A
Non-current Assets:			Deferred Tax Liabilities	#N/A		Financial Expenses		107
Long-term Equity Investments	#N/A		Total Non-current Liabilities	#N/A		Asset Impairment Loss		#N/A
Fixed Assets	#N/A		Equity:			Credit		#N/A
Goodwill	#N/A		Share Capital	#N/A		Impairment Loss		#N/A
Deferred Tax Assets	#N/A		Capital Reserves	#N/A		Add: Investment Income		#N/A
Total Non-current Assets	#N/A		Surplus Reserves	#N/A		Gains from Fair Value		-50
			Profit Distribution	#N/A		Gains from Asset Disposal		#N/A
			Minority Interests	#N/A		Non-operating Income		12
			Total equity	#N/A		Shrctact: Non-operating		33.13
Total Assets	#N/A		Total Liabilities and Equity	#N/A		2. Total Profit		#N/A

Fig. 4. Consolidated Balance Sheet and Income Statement Operation Area

3.3 The Tools Used to Complete the Teaching Case

The entire training process is completed in the Excel table, with the operation area divided according to different internal transactions. Students make adjustments and

offsetting by selecting from drop-down menus (as shown in Figure 5), while amounts need to be entered. If the operations of adjustments and offsetting entries are right, the data will automatically be taken to the working paper, and then the consolidated figures are calculated according to the following formula:

$$\text{Consolidated figure} = \text{Parent company's individual financial statement figures} + \text{Subsidiary's individual financial statement figures} \pm \text{Adjustment and offsetting figures} \quad (1)$$

3. Internal creditor-debtor offset entries

Debit or Credit	Accounting subjects	Amount
	Accounts receivable	
	Accounts Payable	
	Credit Impairment Loss	
	Asset Impairment Loss	
	Deferred Tax Assets	
	Income Tax Expense	
	Long-term Equity Investments	
	Minority Interest	
	Capital Reserve	

Consolidated Financial Statements Working Papers for 2022

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Other Receivables	7	0	7	#N/A	#N/A	#N/A

Fig. 5. Application of EXCEL functions in the operation area and working paper

The data in the working papers will be automatically populated into the consolidated financial statements. There are project and data associations between adjusting and offsetting entries consolidation working papers, consolidated balance sheets, and consolidated income statements. Although the formulas have already been designed, students must master this relationship to ensure the accuracy of the results.

3.4 The Method of Carrying out Teaching Case Practice and Assessment

The training is completed in groups, with the division of labor within the group designed by the members themselves. The contribution of each member scored by all group members. After the task deadline, the training provides the correct answers, but the correct answers only give the comparison area of the working paper and the consolidated financial statements, without the adjusting and offsetting entries. Therefore, students need to check their entries for errors. Students are also required to a training report which can be presented in class or as a video and uploaded to the Learning Management System (LMS) website. The total score is composed of 50% peer evaluation and 50% teacher evaluation^[3].

4 Optimization of Teaching Cases and Future Prospects

The practical training work of the teaching case has been smoothly completed, the students have timely submitted the required materials, and each group has recorded a summary. However, after detailed evaluation, some problems were still found^[4]:

- The practical training results of each group are approximate
- It is difficult to accurately evaluate individuals
- There is a phenomenon of free-riding among group members
- Pursuing results, ignoring the harvest

In order to solve the above problems, future practical training will carry out reforms in terms of organizational methods and work difficulty.

4.1 Cancel Grouping and Change to Individual Completion

In the future, completing the training in the form of individuals is more conducive to evaluation. Although there will also be cases of plagiarism, from the of personal training, it can make those who just get by have to do it themselves, making the scores of the whole class more distinctive.

4.2 The Teacher-assigned Group Changed to a Freely Combined Group

The advantage of free grouping is that it can increase the cooperation among group members, as they are familiar with each other, making communication easier. However, there might be some individuals who cannot find a group to join, in which case the teacher will need to assign them to a group^[5].

4.3 The Whole Class Uses One Case to Become Each Group Choosing Different Cases

Using a single case for the entire class can lead to identical results, making it impossible for stronger groups and students to stand out. In the, a set of cases with varying levels of difficulty could be provided, each corresponding to different scores, allowing groups to choose autonomously. Stronger groups would choose challenging cases, thereby earning higher scores. This would also make it difficult for less diligent groups to coast, resulting in more differentiated evaluation outcomes for the entire class.

4.4 Increase the Workload and Difficulty of Case Work

The workload of the case can be increased in several ways: Firstly, the number of consecutive accounting periods for consolidated financial statements can be increased., the case is one accounting period, which can be increased to two years or even more in the future. Secondly, the types of consolidated financial statements can be. At present, the case includes the preparation of consolidated balance sheets and

consolidated income statements, but in the future, consolidated cash flow statements can be added. Third, the number of internal transactions can be increased.

5 Conclusions

The teaching case training of *Advanced Financial Accounting* is a necessary way to combine theory with practice, which should make full use of modern information technology, continuously optimize various experimental, reform the assessment methods, and achieve the continuous improvement of teaching effectiveness.

Acknowledgement

Research topic: Innovation and Practice of "Student-centered" Teaching Model in Application-oriented Universities in the Era of "Intelligence " [2024dlcjg14]; The Bidirectional Empowerment of New Productive Forces and the Teaching Quality of Private Universities [LMX2024161].

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