Study on Memory Techniques of Fundamental Accounting
Based on a Beginner’s Perspective

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Abstract—It is difficult for students who are beginning to learn fundamental accounting to understand and memorize basic knowledge and master reverence rules and regulations. However, fundamental accounting is compulsory for accounting major, which is the basic requirement and prerequisite for accounting work. It is a must for people who want to engage in accounting work to master basic accounting knowledge. Students who are new to fundamental accounting usually encounter the following problems: failure to remember key knowledge points and relevant knowledge, and failure to apply knowledge even if they do remember, etc. Therefore, the author discusses the means of memorizing basic accounting knowledge, and puts forward five memory techniques to help students master basic accounting knowledge.

Keywords: basic accounting, memory technique, beginner

I. INTRODUCTION

For beginners of fundamental accounting, it is no easy thing to get basic knowledge and master involved rules and regulations. However, the one who wants to be an accountant must grasp fundamentals of accounting given the fact that fundamental accounting serves as not only a required course for students majoring in accounting, but also a prerequisite for a qualified accountant. What's worse, people new to this field are inevitably to encounter such difficulties as incapable to keep key points in mind, poor memory, and failure to apply knowledge into practice even if they do remember it. As a result, the author discusses the memory techniques of fundamental accounting.

II. COMPARISON MNEMONIC

The comparison mnemonic is a method of memorizing the content to be memorized through comparison. The accrual basis and cash basis involved in fundamental accounting are taken as examples.

Accrual basis, also known as accrued basis, means that the recognition of income and expenses should be borne, regardless of whether the payment is received or paid, shall be taken as the income and expenses of the current period and recorded in the income statement. Income and expenses not included in the current period shall not be included in the current period, even if they have been received and paid in the current period. The principle of accrual basis is mainly to stipulate the basis of accounting recognition based on time, and its core is to recognize incomes and expenses according to the actual occurrence period of accrual basis.

Cash basis, also known as cash basis accounting, refers to cash received or paid as the basis for the recognition of income and expenses. It is a system of recognizing the vesting period of income or expenses on the date of actual receipt or payment.

The author compares their applications in the form of a list, as shown in ”Table I".

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### TABLE I. COMPARISON OF ACCRUAL BASIS AND CASH BASIS

<table>
<thead>
<tr>
<th>Cases</th>
<th>Accrual basis</th>
<th>Cash basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case one</td>
<td>Rental income from equipment and machinery, and the rent for the second half of the year should be received in July.</td>
<td>July: rental income accounts for 1/6 of the half-year income; and the rest is seen as advance income in July.</td>
</tr>
<tr>
<td>Case two</td>
<td>Pay the annual newspaper fee in July.</td>
<td>July: newspapers’ expense accounts for 1/12 of the total expenditure; and the rest is treated as prepaid expenses in July.</td>
</tr>
<tr>
<td>Case three</td>
<td>Sign a contract with purchase unit to supply three batches of products to the unit in July, August and September respectively. All the payment shall be paid in one lump sum at the end of March.</td>
<td>The income of July, August and September respectively; and the income receivable but not received in January and February is the accrued income.</td>
</tr>
<tr>
<td>Case four</td>
<td>A three-month loan from a bank was made in July, with the interest due to be repaid in March.</td>
<td>The expenses of July, August and September respectively. Expenses due and unpaid in July and August are accrued.</td>
</tr>
<tr>
<td>Case five</td>
<td>Payments received during the period are the income due for the period, payments made during the period are the expenses due for the period, and the results of recognizing income and expenses based on the accrual and cash basis are identical.</td>
<td></td>
</tr>
</tbody>
</table>

### III. INDUCTION MNEMONIC

The induction mnemonic is a method to summarize the contents by different attributes and then remember these contents and attributes in different categories. The author will take the relationship of several accounting subjects as an example to illustrate its application.

Some learners, especially beginners, are most likely to confuse the several accounting subjects involved in basic accounting, failing to grasp their application and relationship. Such accounting items are "materials in transit", "raw materials", "production costs", "finished goods", "operating costs", "accounts receivable", "deposit received", "accounts payable", and "prepayments".

**A. Relationship between five accounting subjects involving cost and material**

"Materials in transit" belongs to the category of assets. It is mainly used to calculate the material purchase cost that has been purchased but has not yet arrived or has not yet been checked and put into storage when the actual cost is used by the enterprise for daily material accounting. The purchase cost of purchased materials shall include the purchase price, related taxes, transportation fees, handling fees, insurance fees and other expenses attributable to the purchase cost of inventory.

"Raw materials" and "finished goods" also belong to the category of assets. They calculate the various materials in the inventory of the enterprise respectively, including the actual cost of revenue, delivery, and balance such as raw materials, main materials, auxiliary materials, and outsourcing of semi-finished products, awaiting parts, packaging materials, fuel and other income, and the actual cost of the product that the enterprise produces and accepts into storage.

"Production cost" belongs to the cost category, which is used to collect and distribute the expenses incurred in the production process of the product, so as to calculate the product cost correctly.

"Finished goods" belongs to the category of asset, which is adopted to calculate the actual cost of products that the enterprise produces and accepts into storage.

"Operating costs" belongs to the category of profit and loss, which is employed to calculate the cost that should be carried forward when the enterprise confirms the main business income such as sales of goods, provision of labor services, or transfer of asset use rights.

![Fig. 1. Relationship of the five accounting subjects.](image-url)
As shown in "Fig. 1", ① indicates that the materials have arrived at the enterprise and accepted into storage, and the following accounting entry need to be prepared:

Borrow: raw materials ×××
Loan: materials in transit ×××

Case one: On January 2, 2013, Fengdang Company purchases 1,000 kilograms of A material from Kaikai Company at 20 yuan per kilogram, and the input VAT is 3,400 yuan. The materials are still in transit and the full amount is paid by bank transfer cheque. The accounting department shall, on the basis of the stubs of the invoices and transfer checks obtained from the supplier, prepare the following accounting entries:

Borrow: materials in transit — A material 20000
Taxes payable — VAT payable (input tax) 3400
Loan: bank deposit 23400

Case two: The A material mentioned in case one arrives at the enterprise on March 30, 2013 and is checked and put into storage, which is carried over to the purchase cost of A material. The accounting department shall compile the following accounting entries based on the material receipts:

Borrow: raw materials — A material 20000
Loan: materials in transit 20000

② shows materials used in production, which requires the following accounting entries:

Borrow: production costs ×××
Loan: raw materials ×××

Case three: Fengdang Company collected a batch of A material from the warehouse, with a quantity of 100 kg and an amount of 15,000 for the production of A product. The accounting department should prepare the following accounting entries based on the transferred voucher:

Borrow: production cost — A product 15000
Loan: raw materials — A material 15000

③ represents the finished product that has been put into storage.

The cost of finished products here mainly includes manufacturing cost as direct materials, direct labor, and distribution. The following accounting entries are required when they are moved into warehouse:

Borrow: finished goods ×××
Loan: production costs ×××

Unfinished products are still accounted for in "production costs".

Case four: On July 2, 2013, Fengdang Company produced 200 A products and the unit production cost was 15 yuan. All the products were finished and checked into the inventory, which were carried forward to the production cost of inventory. The accounting department should prepare the following accounting entries based on warehouse warrant of the finished products:

Borrow: finished goods — A product 3000
Loan: production costs — A product 3000

④ represents the cost that should be carried forward when the enterprise confirms the main business income such as sales of goods, provision of labor services, or transfer of asset use rights.

Borrow: operating costs ×××
Loan: finished goods ×××

Case five: On August 30, 2013, Fengdang Company carried forward the cost of 50 A products confirmed for sale this month. The accounting department should prepare the following accounting entries based on the product list:

Borrow: operating cost — A product (50 × 15) 750
Loan: finished products — A product 750

From the above analysis, it can be seen that the accounting content of materials in transient and raw material is the same; both are the costs of purchasing certain materials but with different names in different spatial locations. The former accounts for materials that have not arrived at the enterprise, while the latter materials that have reached the company. The cost of production, finished products and operating are all equivalent for a certain product, that is, the same product has different accounting names in different states and its value is equal.

B. The relationship of the four accounting subjects involving rights and obligations

"Accounts receivable" is used to calculate the amounts due from enterprises for operating activities such as selling goods and providing labor services.

"Deposit received" is used to account for advances received by enterprises in accordance with regulations. An enterprise that does not have a high demand for deposit received may also not set up account but directly enter it into accounts receivable.

"Accounts payable" is used to calculate the amount payable by an enterprise for operating activities such as purchasing materials, goods, and receiving labor services.

"Prepayments" are used to account for the prepayments made by the enterprise in accordance with the contract. An enterprise that does not have a high demand for prepayments may also not set up account but directly enter it into accounts payable.

These four items are also the four items on the balance sheet. The author summarizes the means of preparing balance sheet.

"Accounts receivable" shall be filled out based on the total ending debit balances of the subsidiary ledger of

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accounts receivable and deposit received. "Deposit received" shall be filled out based on the total ending credit balances of the subsidiary ledger of accounts deposit received and accounts receivable. "Accounts receivable" shall be filled out based on the total ending credit balances of the subsidiary ledger of accounts payable and prepayments. "Prepayments" shall be filled out based on the total ending debit balances of the subsidiary ledger of prepayments and accounts payable. Here are some examples.

Case six: After Panpan Group's settlement on December 31, 2015, the relevant account balances are shown in "Table II".

<table>
<thead>
<tr>
<th>Course title</th>
<th>Debit balance</th>
<th>Credit balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>3000000</td>
<td>200000</td>
</tr>
<tr>
<td>Prepayments</td>
<td>1400000</td>
<td>1000000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>600000</td>
<td>3400000</td>
</tr>
<tr>
<td>Deposit received</td>
<td>1000000</td>
<td>2600000</td>
</tr>
</tbody>
</table>

In the balance sheet of the company on December 31, 2015, the amount of relevant items is:

The amount of accounts receivable = 3000000 + 1000000 = 4000000 (yuan)

The amount of prepayments = 1400000 + 600000 = 2000000 (yuan)

The amount of accounts payable = 100000 + 3400000 = 3500000 (yuan)

The amount of deposit received = 2600000 + 200000 = 2800000 (yuan)

IV. LIST MNEMONIC

List mnemonic is a good form that helps people to properly store and retrieve knowledge, which is clear, logic, convenient for comparative analysis, and a driver to deepen understanding and memory.

Most basic accounting textbooks describe the rendition period of accounting files as follows: "The rendition period of accounting files can be divided into two categories: permanent and regular. In the accounting files of units and other organizations, the annual financial report, the accounting file keeping list and the destruction list of accounting files shall be kept for permanent purposes, while the others shall be kept for regular periods. The term of regular rendition period can be divided into 5 categories: 3 years, 5 years, 10 years, 15 years and 25 years. Among them, there is a 3-year rendition period for monthly and quarterly financial reports; 5 years for fixed assets card, bank reconciliation, and bank statement; 15 years for vouchers, general ledger, subsidiary account, auxiliary books, and transfer list of accounting documents; and 25 years for journal cash and bank deposit. The rendition period for accounting records shall be counted from the first day after the end of the fiscal year." It is even better to use a table to represent such a long paragraph, as shown in "Table III", which is simple and easy to remember.

<table>
<thead>
<tr>
<th>Number</th>
<th>Record title</th>
<th>Retention period (year)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Original voucher</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Posting document</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Summarized voucher</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>General ledger</td>
<td>15</td>
<td>Journal ledger is included</td>
</tr>
<tr>
<td>5</td>
<td>Subsidiary account</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Journal</td>
<td>15</td>
<td>Journal of cash on hand and bank deposit should be kept for 25 years</td>
</tr>
<tr>
<td>7</td>
<td>Fixed assets card</td>
<td>3</td>
<td>The retirement and liquidation of fixed assets should be kept for 5 years</td>
</tr>
<tr>
<td>8</td>
<td>Auxiliary books</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Financial accounting report</td>
<td>3</td>
<td>Text analysis is included</td>
</tr>
<tr>
<td>10</td>
<td>Monthly and quarterly financial reports</td>
<td>3</td>
<td>Text analysis is included</td>
</tr>
<tr>
<td>11</td>
<td>Annual financial accounting report (final settlement)</td>
<td>3</td>
<td>Text analysis is included</td>
</tr>
<tr>
<td>12</td>
<td>Other accounting materials</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Accounting transfer list</td>
<td>Permanent</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Keeping list of accounting records</td>
<td>Permanent</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Bank reconciliation</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

TABLE III. YEARS OF KEEPING ACCOUNTING RECORDS OF ENTERPRISES AND OTHER ORGANIZATIONS
The above text is listed in "Table III". In this way, students do not need to read large paragraphs of text, but only look at the table.

V. KEYWORD METHOD

Keyword method, that is, in the process of learning or reviewing, students memorize the knowledge they need to remember with the help of keywords, and then improve the content according to their usual knowledge reserve, which can avoid unnecessary cramming, not only save time, but also improve learning efficiency and interest. Based on this method, the author (2013) proposed to use the keyword analysis to analyze economic business and discuss the compilation of basic accounting entries. This paper takes the preparation of bank reconciliation as an example to illustrate the use of this method.

The balance in the bank deposit journal (hereinafter referred to as journal) is inconsistent with that in the bank statement (hereinafter referred to as statement). If it is deposit in transit that causes the inconsistency between the two, the “replenishment” balance adjustment method is generally adopted. The compilation method is as follows: on the basis of the balance of the two parties, each party plus the accounts received by the other party and not received by the party, minus the accounts paid by the other party and not by the party to calculate and adjust the due balance of the two. The technique used in this process involves three steps: first, find the word "not" or "no" from the given items; find out whether the bank or the enterprise fails to make bookkeeping according to key words, and then determine the supplement column; Finally, determine the increase or decrease of supplement according to data recorded by the party to whom an account has been kept.

For example, on August 31, 2014, the balance of bank deposit journal of Jianghe Company was 27,000 yuan, while the balance transferred by Agricultural Bank of China (hereinafter referred to as ABC) was 41,500 yuan. The following deposits in transit are found through checks.

- The company sent a cheque for transfer of 30,000 yuan, and the registered bank deposits increased, but the bank has not yet recorded.
- The company issued a transfer check of 22,500 yuan, but the holder of the bill has not yet handled the transfer, and the bank has not yet recorded it.
- The company entrusts the bank to collect the payment of 24,000 yuan from a company. The bank has received the payment and registered it into the account, but the company has not yet received the payment notice and has not yet recorded it.
- The bank paid the telephone fee of 2,000 yuan on behalf of the enterprise, and the registered deposits of the enterprise decreased, but the enterprise did not receive the payment order and had not yet recorded the book.

The analysis based on the compilation skills is as follows ("Fig. 2", "Fig. 3", "Fig. 4" and "Fig. 5"):

Fig. 2. Economic business 1.

The first is to find the word "not". Then it’s needed to find out whether the bank or the enterprise fails to make bookkeeping. Thanks to the keywords "bank" and "unaccounted", it can be seen that the ABC failed to record 30,000 yuan in the account of the company, so, the bank statement sent by the bank should be made up. Whether the record is increased or decreased depends on whether the bank journal of the company is increased or decreased. As can be seen from the above keywords "enterprise", "bank deposit" and "increase", the account has been recorded in the bank deposit journal of the company, and increased bank deposit 30,000 yuan. Therefore, in the preparation of the bank deposit reconciliation statement, the bank statement sent by ABC should record an increase of 30,000 yuan.

Fig. 3. Economic business 2.
The first is to find the word "not". There are two "not" in total, but the main body of the first is the holding unit, not enterprise and bank. The unit that holds ticket did not handle transfer to the bank, which shows the bank is not aware of the thing. Therefore, the two "not" mutually confirmed the bank did not keep the book. Then, find out whether the bank or the enterprise fails to make bookkeeping. Thanks to the keywords "bank" and "unaccounted", it can be seen that the ABC failed to record 22,500 yuan in the account of the company, so, the bank statement sent by the bank should be made up. Whether the record is increased or decreased depends on whether the bank journal of the company is increased or decreased. As can be seen from the above keywords "enterprise", "bank deposit" and "increase", the account has been recorded in the bank deposit journal of the company, and increased bank deposit 22,500 yuan. Therefore, in the preparation of the bank deposit reconciliation statement, the bank statement sent by ABC should record an increase of 22,500 yuan.

![Fig. 4. Economic business 3.](image1)

The first is to find the word "not". There are two "not" in total, the main body of which is the enterprise, indicating that there is no entry in the journal of bank deposit of the company and it should be added. Whether the record is increased or decreased depends on the journal of ABC. According to the keywords "bank received" and "accounting", it can be seen that the bank has booked and increased the deposit of the enterprise. The bank statement sent to the enterprise should also include this content. Therefore, Jianghe Company should record an increase of 24,000 yuan in the bank deposit journal in the preparation of bank reconciliation.

![Fig. 5. Economic business 4.](image2)

The first is to find the word "not". There are two "not" in total, the main body of which is the enterprise, indicating that there is no entry in the journal of bank deposit of the company and it should be added. Whether the record is increased or decreased depends on the journal of ABC. According to the keywords "bank payment", "registration" and "decrease", it can be seen that the bank has booked and reduced the company's deposit. The bank statement sent to the company should also include this content. Therefore, Jianghe Company should record a reduction of 2,000 yuan in the bank deposit journal in preparing bank reconciliation.

Based on the results of the above analysis, the bank reconciliation is prepared as shown in "Table IV":

<table>
<thead>
<tr>
<th>Project</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of bank deposit journal of enterprise</td>
<td>27000</td>
</tr>
<tr>
<td>+: received by the bank and unpaid by the company</td>
<td>24000</td>
</tr>
<tr>
<td>-: paid by the bank and unpaid by the company</td>
<td>2000</td>
</tr>
<tr>
<td>Adjusted deposit balance</td>
<td>49000</td>
</tr>
<tr>
<td>Balance of bank statement</td>
<td>41500</td>
</tr>
<tr>
<td>+: received by the enterprise and unpaid by the bank</td>
<td>30000</td>
</tr>
<tr>
<td>-: paid by the enterprise and unpaid by the bank</td>
<td>22500</td>
</tr>
<tr>
<td>Adjusted deposit balance</td>
<td>49000</td>
</tr>
</tbody>
</table>
VI. RECALL MNEMONIC

Recall mnemonic is to constantly challenge oneself in the process of memorizing. There are many ways to self-test, mainly by self-retelling, writing by oneself, and writing questions for oneself.

As shown in "Table I", when reviewing this table, students will think about how to set questions to test this knowledge point if they are the examiners. Single-choice, multiple-choice and judgment questions are available.

A. Single-choice question
   For example, the deposit period of the bank deposit journal is ( ).
   A. 4 years   B. 6 years   C. 25 years   D. permanent
   One of the four choices is correct, and the other three answers are made up. Sometimes the retention period of other vouchers and account books can be included in the options for students to analyze and identify.

B. Multiple-choice question
   Which one enjoys permanent retention period ( )
   A. Accounting transfer list  B. Keeping list of accounting records  C. Destruction list of accounting records  D. Fixed asset card
   At least two of the four options are correct. As can be seen from "Table I", it should be B and C. This question is set for knowledge points with common characteristics.

C. Judgement question
   The retention period of enterprise's annual financial accounting report is permanent ( )
   That judgment should be right, but it would be wrong to replace the word "permanent" with something else.
   
   The students who are studying the knowledge points in "Table I" not only deepen their impression of the knowledge points, but also grasp the test direction of the knowledge points with the help of the above three types of questions. Experts naturally think of questions that students who take accounting title examination can come up with.

   Hermann Ebbinghaus, a famous psychologist in Germany, believes that the speed of forgetting is very fast in the initial stage of memory, then it will gradually slow down, and after a long time it becomes level. So, the student that learns fundamental accounting should consolidate knowledge point in time, and employ above method to strengthen memory.

VII. CONCLUSION

The above-mentioned methods are not used in isolation. Students can employ different methods to understand and memorize varied knowledge points, or combine the above methods. Fundamental accounting is compulsory for work concerned. The course is theoretically and practically vital for the mastery and application of accounting knowledge. Students who are new to accounting can adopt methods described above to better their memory, master accounting knowledge, and carry out related work quickly.

REFERENCES