



USING INTERACTIVE METHODS IN TEACHING ACCOUNTING

SAVA Raluca

Lucian Blaga University of Sibiu, Romania

Abstract:

Active learning shifts the focus of instruction from what the teacher should teach or deliver to students, to what the students should be able to do with the course material. Interactive methods are modern ways of stimulating teaching, representing tools of learning which favor the interchange of ideas, experiences, and knowledge. The purpose of this paper is to present a series of active teaching methods for the accounting data as being an alternative in the process of improving the teaching and learning of the accounting process.

Key words: active learning, accounting

1. Introduction

Active learning involves providing opportunities for students to meaningfully talk and listen, write, read, and reflect on the content, ideas, issues, and concerns of an academic subject. (Meyers & Jones, 1993, p. 6)

Active learning shifts the focus of instruction from what the teacher should teach or deliver to students, to what the students should be able to do with course material. Similarly, students must enter class prepared to use assigned readings and reviewed material from past classes, etc. Not only are students expected to be up-to-date on course material, but to have assimilated the material so they can use and build on it. When students recognize that the course involves active learning, they will also recognize that they must be active if they are to succeed in the course. Active learning techniques are not educational magic bullets. Of course some of students may not be willing to abandon their passive roles. But between those who are self-motivated and those who choose to sink, there is most likely a large middle group who, with some facilitating from the teacher, will be active learners and markedly improve their performance and long-term command of the material.

Bonwell and Eison (1991), Meyers and Jones (1993) and Raux (2004) have examined classroom learning methods and found that today's students learn more, retain more, and are more successful when active learning methods are employed in the classroom as opposed to traditional passive learning methods.

The interactive methods are modern ways of stimulating teaching, representing tools of learning which favor the interchange of ideas, experiences and knowledge. Interactivity is characterized by the desire for active cooperation and involvement with a deep active-participatory character. Learning is achieved through communication and collaboration. It is based on mutual relationships and it refers to the process of active learning, whereby, the learner acts on information in order to turn it into new, personal and internalized information. In a constructive way, the learner rebuilds senses by exploring the environmental / educational environment, solving problems and / or using the information gained in new situations.

The interactive-creative learning represents an evolutionary process, which is based on the receptivity to new experiences, searched and solved through exploration, deduction, analysis, synthesis, generalization, abstraction, concretization, focusing on making connections between the senses and requiring a deep intellectual, psychomotor, emotional and volitional involvement. Under the creative-interactive learning, the student discovers; imagines, builds and redefines the meanings, filtering them through the prism of his own personality and involving his higher mental and creative processes. The creative-interactive learning occurs due to the individual and collective efforts, of the interaction of the trainee with others, based on the social exchanges in acquiring the new.

The benefits of the interactive methods and their formative valences are presented in the following table:

The benefits of the interactive methods	Formative valences of the interactive methods
<p>They create habits;</p> <ul style="list-style-type: none">• facilitates learning at ones own pace;• stimulates cooperation, not competition;• they are attractive and can be approached from the point of view of different learning styles.	<ul style="list-style-type: none">• stimulates active involvement;• practicing the analytical capacity of students;• ensure a better implementation of knowledge and skills;• harnesses and stimulates the creative potential;• works on the development of critical thinking of students;• stimulates responsibility;• ensures the development of "group" culture, cooperation, mutual assistance;• develops argumentation.

Globalization, increasing the competitiveness and the uncertainties of the economic environment causes companies to adjust their economic behaviour, fighting to maintain their performances. Professional accountants play a vital role in achieving success. They must use their knowledge to obtain the competitive advantage.

Between the skills required of a professional accountant, identified by Cory and Pruske in the article NECESSARY SKILLS FOR ACCOUNTING GRADUATES: AN

EXPLORATORY STUDY TO DETERMINE WHAT THE PROFESSION WANTS, we can also find creativity in problem solving together with the spreadsheet software, the work processing software, awareness of ethical issues, internet research, presentation software, and database software.

The American Institute of Certified Public Accountants (AICPA, 1998) Special Report on The Competency-Based Professional Curriculum has emphasized four core areas in which teaching and learning should be focused. These are functional competencies, personal competencies, broad business perspective competencies and the integration of these.

Functional competencies are technical competencies which accounting students should be able to use: strategic and critical approaches to decision-making. They must objectively consider issues, identify alternatives and implement solution - oriented approaches to add value.

Personal competencies involve the attitudes and behavior of those preparing to enter the profession. Communication is one example of a personal competency: Individuals entering the profession should have the ability to listen, deliver powerful presentations and produce effective business writing.

Broad business-perspective competencies relate to understanding the business context in which accountants perform services. Strategic or critical -thinking is a broad business-perspective competency. It encompasses the ability to link data, knowledge and insight from various disciplines to appropriate information helpful in decision-making. Use of technology is a critical part of this competency.

Integration: while functional, personal and broad business competencies are each independently important, students must be able to integrate the skills from all three categories.

The accounting profession requires more creativity and innovative thinking in order to be competitive.

The Accounting Education Change Commission (AECC, 1990), stated in 1990: "Accounting programs should not focus primarily on memorization of technical facts. Students should be taught the skills and strategies that help them learn more effectively of how to use these effective learning strategies to continue to learn throughout their lifetimes. Students must be active participants in the learning process, not passive recipients of information. They should identify and solve unstructured problems. Learning by doing should be emphasized. Working in groups should be encouraged. Accounting classes should not focus only on accounting knowledge. Teaching methods that expand and reinforce basic communication, intellectual, and interpersonal skills should be used".

The teaching of accounting has been done, mostly, by conventional (traditional) or slightly sophisticated teacher-centered methods rather than modern student-oriented applications and techniques while the transmission of knowledge and information has been realized with the usual form of lectures or discussions. By implementing a student-centered approach in the classroom, the hope is to have a

self-confident, critical-thinking student who fully understands the terminology and fundamentals of accounting.

The role of accounting educators is to teach their students communication skills, positive work ethic and appropriate professional behavior besides providing them with accounting knowledge and skills (Braun & Sellers, 2012).

Using "The six thinking hats" of Edward de Bono in teaching accounting

If you interpret the role of a thinker, you will become one..." Edward de Bono.

The Thinking Hats method is an interactive method, which stimulates the creativity of the participants who rely on the interpretation of roles depending on the chosen hat. There are 6 Thinking Hats, each with a different color: white, red, yellow, green, blue and black. The group members choose their hats and will thus perform the precise role, as they consider best. The roles can be reversed; participants are free to say what they think, but they must be consistent with the role they are playing. The color of the hat is the one defining the role. Therefore:

White hat	Provides an objective view over the information
	Is neutral
	Is focused on objective facts and clear images
	Lies under the objective thinking
Red hat	Unleashes the imagination and feelings
	Offers an emotional perspective on events
	Red can mean anger or fear
	Unleashes the affective states
Black hat	Expresses caution, care, warning, judgment
	Provides a dark, sad, bleak insight over the situation in question
	It is the perspective of the negative, pessimistic thinking
Yellow hat	Gives a positive and constructive perspective on the situation
	Yellow symbolizes sunshine, brightness, optimism
	It is the optimistic, constructive thinking, having a logical basis
Green hat	Express new ideas, stimulating creative thinking
	It's the fresh green of the grass, vegetation, abundance
	It is the symbol of fertility, of producing new, innovative ideas
Blue hat	Expresses the control of the thinking process
	Blue is cold; is the color of the sky that is above all, all-seeing and all-knowing
	Supervises and directs the smooth running of the activity.
	It is the desire to control and organize.

Participants must know very well the meaning of each color and to represent each hat, thinking from its perspective. It doesn't matter the hat itself, but what it means, what it induces each of its color. The 6 Thinking Hats can be seen in pairs: white hat - red hat; black hat - yellow hat; green hat - blue hat.

2. How to use this method?

The 6 Thinking Hats are divided to students and it is provided the case under discussion for everyone to prepare their ideas. The hat can be worn individually - and then the student fulfills his role - or more students can meet under the same hat. In this case, the students of the group who plays a Thinking Hats role cooperate in ensuring the best interpretation. They can each wear a hat of the same color, being aware that: the blue hat clarifies, the white hat informs, the green hat generates new ideas, the yellow hat brings benefits, the black identifies faults and the red hat says what its feelings are about the issue in question.

The 'six hats' strategy is a co-operative, rather than an adversarial tool. In a team it can be easy for someone not to see the positives of an idea or initiative they don't support, but the 'six hats' technique challenges participants to see all sides of a problem. De Bono describes the 'six hats' as a 'game', but despite its simplicity, his method is very powerful and is used extensively in industry and the professions.

Example: The analysis of the development of the activity of an accounting firm

You are two partners in an accounting firm and you must consider the possibility of developing the business using the thinking hats method.

Using the white hat which is neutral, the data and information regarding the results of the company at that time must be analyzed. Use the questions: What information do we have? What information is missing? What information do we want to have? How can we get that information? Review the options of a firm that wants to expand: renting a new space, hiring additional staff, local competition, etc.

Under the red hat the emotions, fears, intuitions, feelings, without justification must be taken into account and must be used formulations like: putting my red hat, look how I look at things....; My sense is that ...; I do not like the way it was done; my intuition tells me that Wearing this hat partners recognize their concern about hiring a new person in the company. They recognize that there exists the possibility of one of them getting sick and being unable to continue in one's activity. At the same time they are excited about the idea of increasing their activity and they recognize the fact that they are working as much as they can but maybe they don't work efficiently enough.

The black hat provides the two a critical judgment, thinking negative but logical and it warns them of what cannot be done, of what is non-profit, risky or dangerous. The questions posed are: What are the errors? What prevents us? What risks we expose ourselves to? They doubt that they will find a way to grow the practice that meets both of their aspirations. It's going to cost money and there isn't a lot spare to go around. They start to dismiss the various ideas they have explored as being impractical, too costly, too slow or unproven.

The yellow hat provides the two an optimistic, logical and positive perspective. They should explore the benefits and opportunities, using these questions: What are the objectives? What is based on these ideas? What are the benefits? How do I / we

get close to this vision (perspective)? They start to speculate about how soon they might reap the benefit of their expansion plans and how much easier life will become if they bring someone new on board.

Under the green hat, the two take into account new options, alternatives, resources, structures, methods, ideas, using formulations such as: The chance of success is if ...; Can we do this in another way? Can we find another explanation? For example: including a business coach, merger, takeover, recruitment or the use of more outsourcers.

The blue hat controls the thinking process for it to become more productive and organizes the action; oversees, systematizes the conclusions, comments, directs and leads towards the next step using the questions: Can we summarize the views exposed? What's the next step? What are the main ideas?

De Bono's 'Six Thinking Hats' is an effective technique for looking at the effects of a decision from a number of different points of view. It allows accountants to include a measured amount of emotion and scepticism in what would otherwise be purely rational decisions. It opens up the opportunity for creativity when big decisions are required.

Another active method that can be used successfully in the teaching method of accounting is the cube method. It is a method of cooperation and direct exploration used when it is wanted to address a theme, a subject from multiple perspectives and it represents a bridge between learning theories, styles of thinking, learning levels.

The cube method helps to analyze a subject from different points of view belonging to the four thinking styles: active, reflective, theoretical and pragmatic. The active student is the one who works in order to quickly reach finality; identifies; names; applies but he is too enthusiastic and does not do these carefully. The reflective student analyzes, compares, criticizes, relates and justifies. The theorist analyses the details, classifies them, formulates taxonomies, generalizes and theorizes. The pragmatic student first identifies, names, classifies and then proceeds directly to the application or to the final conclusion.

Because in a group of students we meet all four thinking styles, the teacher has the duty to provide satisfactions to each style in part, but also to complement the deficiencies of these styles.

The levels of learning that the student can and tends to reach are:

- ✓ Unistructural, when the student identifies or appoints elements;
- ✓ Multi-structural, when the student combines notions, enumerates describes them;
- ✓ Relationship wise, the student manages to analyze, compare, criticize, explain the causes of the phenomena and of the existing relationships;
- ✓ Abstract wise, in this case the student theorizes, draws, creates or generalizes about the process, phenomena or others.

The cube method has six tasks (the cube has six faces):

1) Describes; 2) Compares; 3) Associates; 4) Analyses; 5) Applies; 6) Bring arguments;

Solving the tasks on each face of the cube the student reaches the four levels of learning: (a) the uni-structural level, through the description and comparison tasks, the student identifies how the author describes and compares; (b) the multi-structural level through the description task, when the student presents in his own words and through comparison, confronting with representations from his own experience or from the information he already learned; (c) the relational level through the tasks where he associates, analyses and applies; (d) the abstract level through the argumentative task.

Stages of using the cube method:

1. The teacher presents the cube and explains the steps of applying the technique: the cube has six sides, on which there are written, indicating the order, the verbs that refer to the thinking operations: describes (1), compares (2), associates (3), analyzes (4) , applies (5) and argue (6). For each face of the cube an A3 sheet will be used.
2. The teacher announces the theme and specifies the time granted to solve the task;
3. Students solve the tasks;
4. It is announced the final shape of the cube after the solutions from the whole class were collected. There will appear on the board the resolved solutions, suggesting an unfolded cube.

For the success of this method several conditions must be met:

- 1) To go through all the steps in the order specified without any operations being omitted.
- 2) Even if the tasks are shared between students or teams, each of them must complete all the intellectual operations, but only present the moment that they were assigned.
- 3) The teacher must clearly explain the objectives of the work, the time they have available and the necessary materials must be ready on time.
- 4) The teacher must clearly define the working rules and monitor their compliance:
 - everyone speaks at a time; not attacking the person but the opinion;
 - do not monopolize the conversation; the task must not be solved by a single person.

Theme: Balance sheet - part of the annual financial statements

- The description task: Students have in front of them a balance sheet in print format and access to supporting materials - books, notebooks, sheets from portfolio). Characterize the balance sheet and enclose it in the annual financial statements of the company; Describe how it was prepared.
- The comparison task: They must set similarities and differences between the balance sheet and other components of the financial annual statements. They have as model the balance accounting sheet, the income and loss statement, the cash flow statement and the statement of changes in equity in printed format.
- The association task, Table 2: Assign the items in column 2 to the balance sheet structures of column 1 (the column 2 elements are shown mixed up).

Column 1 - Balance sheet structures		Column 2 - Elements	
A.	Fixed assets Assets (fixed) intangible	1. A	constitution expenses
		2. ...	consumables
		3. ...	production in progress
		4. ...	cash
		5. ...	intangible assets in progress
B.	Fixed assets Tangible assets	6. ...	lands and land improvements
		7. ...	share premium
		8. ...	technical installations, transport means
		9. ...	animals and plantations
		10. ...	furniture, office equipment, equipment for the protection of human and material values
C.	Fixed assets Financial assets	11. ...	loans granted to entities with which the company is linked by virtue of participating interests
		12. ...	goods
		13. ...	loans granted to affiliated entities
		14. ...	raw materials
		15. ...	tangible assets in progress
D.	Current assets Stocks	16. ...	tangible receivables
		17. ...	shares held by the affiliated entities
		18. ...	participation interests
		19. ...	development expenditures
		20. ...	materials as inventory objects
		21. ...	advance payments granted to the staff
		22. ...	trade receivables (customers, clients- invoices to be issued, advance payments granted to suppliers, receivables from materials and packages for returning)
		23. ...	animals and birds
		24. ...	social claims
		25. ...	concessions, patents, licenses, trademarks, similar rights and assets, excepting those created by the entity.
E.	Current assets Claims / receivables	26. ...	goods found in custody, for processing or in consignment from third parties
		27. ...	waste products
		28. ...	preforms
		29. ...	payable amounts from the companies within the group
		30. ...	payable amounts from participation interests;
		31. ...	claims regarding the capital subscribed and unpaid;
		32. ...	packaging;
		33. ...	abonamentele plătite în avans
		34. ...	debts to the staff
		35. ...	receivable effects.
F.	Current assets Short term investments	36. ...	shares held in the affiliated entities on short term
		37. ...	shares bought on short term
		38. ...	issued and redeemed bonds in the short term
		39. ...	bought bonds in the short term
G.	Current assets Cash flow and bank accounts	40. ...	commercial fund
		41. ...	prepaid insurance premium
		42. ...	receivable amounts
		43. ...	tax debts
H.	Settlement accounts Expenses registered in advance	44. ...	Loans of bond emissions with a maturity below 1 year
		45. ...	claims related to the state budget and special funds
		46. ...	in accounts at banks
		47. ...	prepaid interests
I.	Debts Current debts	48. ...	short-term bank loans
		49. ...	rents paid in advance
		50. ...	legal reserves
		51. ...	subscriptions received in advance
		52. ...	bank deposits

		53. ...	receivables from various debtors
		54. ...	paid subscribed capital
J.	Debts Non-current debts	55. ...	payable debts in a period exceeding one year
K.	Settlement accounts Incomes registered in advance	56. ...	receipts from rents in advance
		57. ...	commercial debts
		58. ...	Insurance payments received in advance
L.	Own capital Social capital	59. ...	uncovered loss
		60. ...	debts to social security and social protection
M.	Own capital Rezerves	61. ...	advances collected in the orders account
		62. ...	profit
		63. ...	Other reserves
N.	Own capital Premiums related to capital	64. ...	construction
		65. ...	fusion bonuses
		66. ...	intake bonuses
O.	The result of the exercise	67. ...	statutory reserves
		68. ...	Loss
P.	Reported result	69. ...	Undistributed profit
		70. ...	Unpaid subscribed capital

- The analyze task: Analyze and describe each of the elements of the balance sheet.
- The argumentation task:

- Answer true (T) or false (F) to the following requirements:

- The balance sheet is a summary accounting document which contains elements of asset, liabilities and equity of the company at the end of the year. T
- The balance sheet includes some assets and liabilities grouped by nature and liquidity, respectively by nature and enforceability. F
- The economic goods represent the ASSETS and the financing sources represent the LIABILITIES of the sheet. T
- An asset is recognized in the balance sheet when it exists the probability of realizing a future economic benefit by the entity and the asset has a cost or value that can be reliably measured. T
- An asset is recognized in the balance sheet when the cash outflow is unlikely to generate economic benefits for the entity in the future periods. F
- A liability is recognized in the balance sheet when it is probable that an outflow of resources, bearing economic benefits, will result from the liquidation of a present obligation, and when the value at which this liquidation will be realized can be measured reliably. T
- Bring arguments in writing for the importance of the balance sheet.

- **The application task:** Fill out the balance sheet of the company Alfa starting from the trial balance drawn at the end of the financial exercise 201X.

After the work time has expired, instead of the fourth stage of presenting the results, the teacher can also apply the method "gallery tour". The materials produced, drawings, will be exhibited in the classroom in 6 visible places. The leaders from each group will first present their work task and how they achieved it, then, at the signal

given by the teacher, they will move, sequentially, on every board of their colleagues from another group and they will grant them a grade. After each group has visited the "gallery" and noted accordingly the realizations of their colleagues, the grades received and their objectivity will be discussed, appreciations will be made and any errors will be corrected.

Using this method brings a number of benefits to the educational process on the one hand in terms of differentiating the learning tasks and on the other hand by addressing a complex theme, from all points of view. At the same time by working collectively the attention of the students and the logical thinking are stimulated, also the participants learn from each other and there is a rapid feedback.

3. Conclusions

The economic environment found in a continuous change demands reconsidering the role of training the students in the accounting domain. Activation of teaching - learning of the accounting domain involves the use of some methods, techniques and procedures that involve the student in the learning process, aiming to develop critical thinking, stimulate creativity, develop an interest in learning, in the sense of forming him as an active participant in the training process. The option for one method or another is also in a close relationship with the teacher's personality and level of preparation, predisposition and the student group learning styles with which it is worked. Using interactive teaching methods in the classroom, the hope is to have a self-confident, critical-thinking student who fully understands the terminology and fundamentals of accounting.

4. References

- American Institute of Certified Public Accountants (AICPA). (1998) *"AICPA Core Competency Framework for Entry into the Accounting Profession"*, New York: AICPA, Available: <http://www.aicpa.org>.
- Bonwell, C. C. and Eison, J. A., *"Active Learning: Creating excitement in the classroom"*, ASHE-ERIC Higher Education Report No. 1, Washington D.C.: The George Washington University, School of Education and Human Development, 1991.
- Braun, K. W. & Sellers, R. D. (2012). *Using a "Daily Motivational Quiz" to Increase Student Preparation, Attendance, and Participation*. *Issues in Accounting Education*, 27(1), 267-279.
- Cory, S. N., Pruske, K. (2012). *Necessary Skills for Accounting Graduates: an Exploratory Study to Determine what the Profession Wants.*, Proceedings of ASBBS Volume 19 Number 1
- Meyers, C. and Jones T.B., *Promoting Active Learning: Strategies for the College Classroom*, Jossey-Bass Publishers, San Francisco, CA, 1993. Morton, L. P. (2002, Summer). Targeting Generation Y. *Public Relations Quarterly* 47 (2), 46-48.
- Raux, Donald J., *"Implementing Active Learning in College Accounting Classes"*, *Explorations in Teaching and Learning*, Vol. 16, No. 1, Winter, 2004.
- Raux, Donald J., *"Teaching an Effective Accounting Class in the 21st Century: Using Active Learning Techniques"*. *European Journal of Management*, Volume 9, Number 4, 2009.