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NEW DIDACTIC APPROACHES IN ACCOUNTING: MOVING BEYOND THE CALCULATION EXERCISE

Abstract:

Case studies have been utilized frequently throughout business curricula. In the domain of accounting, however, cases have not been as proliferated. The aim of the paper is demonstrate the use of secondary case studies in the didactics of an undergraduate introductory accounting course. Authentic stories from professional journals and daily newspapers have been used for students to critically examine real-life accounting applications. Based on subsequent longitudinal student survey undertaken in two consecutive academic years, secondary case studies have been found effective in delivering real-life accounting applications, enabling greater understanding of accounting phenomena, and enhancing didactic approach in and above the accounting domain.

Keywords:

didactics, accounting, case studies, teaching, student feedback

JEL Classification: M41, M49, A22

Case Studies and Stories in Accounting

Even for accounting, 21st century has brought in a plethora of abstract information and increased complexity of accounting information (Radváková, 2014). It is a challenge for any accounting instructor to design an introductory course in a way, in which students are able to learn, understand and apply key accounting concepts, methods, and principles. Accounting didactics has been well advanced (e.g. Bonner, 1999). Learning outcomes from introductory accounting courses, however, are usually far from desired standards of an accounting profession, for which specialized professional certifications have been developed. Empirically-based case studies provide the link between the accounting teaching and research (Cullen et al., 2004).

Traditional accounting case studies involve an analysis of artificially designed and streamlined examples, in which information is limited to and at large linked to a particular phenomenon. Unlike in reality where information seems to be complex and navigation through events and scattered data is yet to be found. Case studies are usually historical in nature, although realistic and enabling general principles to be well documented and introduced (Otáhal, 2012). Apart from being realistic, case studies usually defined causal relationships, which seem critical for the area of accounting. Case study examples are easier to comprehend and remember. The mixture of traditional textbook-based case studies and calculations was found more effective for learning outcomes in accounting than the exclusive use of calculations only (Stewart and Dougherty, 1993), regardless whether students have or have not previous working experience (Ballantine and McCourt Larres, 2004). The use of case studies in accounting enables development of additional (soft) skill for learners (Boyce et al., 2001).

In human brain, strong connections serve the purpose of digesting useful information while consuming the least possible energy (Rock, 2009). Strong connections, which have been created in the past, may prove irrelevant to tackle new problems. Advising students or let alone allowing them to explore events through case studies may not be sufficient to break the barrier of established mental processes. There may be a need for significant, substantial or otherwise bold new experiences to decompose outdated mental structures and build new connections (Johnson, 1991). Speer et al. (2009) confirmed through magnetic resonance that reading stories activated brain cells just as strongly as being part of the story or performing the actions. Stories were able to substitute mentally for experiences. Therefore, it might be a question whether stories and storytelling could assist accounting instructors in causing meaningful mental transformations inside their classrooms. Some of those stories might be told through anecdotal evidence published in conventional newspapers and professional magazines. As Hayek (1980) asserts: learning processes allow only for imperfect verification and validation; common sense based on previous experience and study are more or less the base, on which inferences are made.

It is a matter of fact for all disciplines that they relate to most real life problems, without being directly referred or explicitly connected to a particular domain. Stories used in the classroom remind everyone, that there are real people behind them (Simmons, 2006).

However, such stories must be realistic and not artificially constructed. Stories appealing to emotions tend to be stored in human minds longer than the ones lacking the emotional attachment.

Experimental Use of Novel Didactic Approach among Students

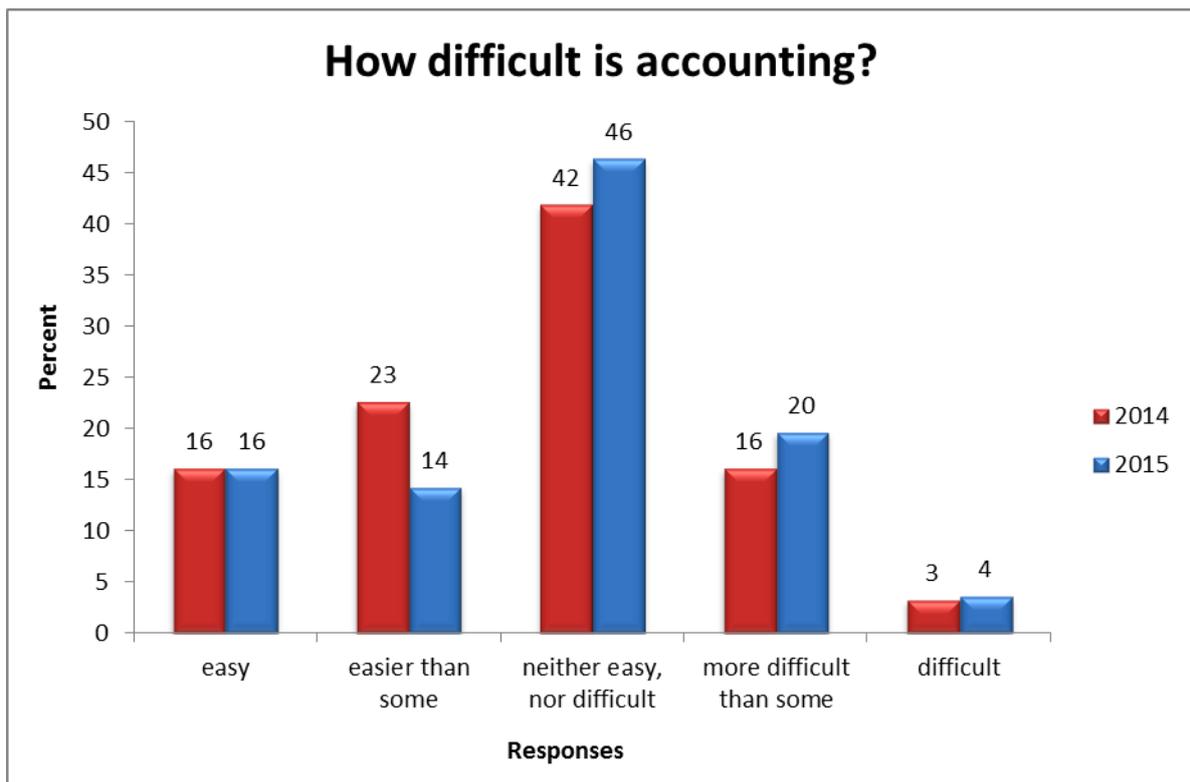
Traditional teaching methods in accounting commonly include hypothetical and real-life cases from textbooks, which may or may not be up to date, and calculation exercises, which aim at demonstrating usually one particular and in nature streamlined issue. During the last two academic years, real-life small secondary cases (sometimes called cassettes, see Appendix 1. for further reference) have been introduced as one of the didactic approaches in the introductory accounting course, which is taught in the first year, at a mid-sized Czech business school with the freshmen year size of about 130 students in a given degree program (all were general business administration major students) in the full-time mode of study. Before introducing small real-life cases, the instruction of accounting at the particular school was dominated by a combination of lectures (frontal teaching in a large lecture hall) and seminars (smaller group teaching), where seminars were almost entirely based on calculation exercises.

In the academic year 2013/2014, 124 students took the class, out of which 31 participated in the subsequent didactics survey (response rate of 25 %). In this year, 2 small real-life cases were used throughout the course. In the academic year 2014/2015, the class was attended by 115 students, out of which 56 decided to take part in the subsequent survey (response rate of 47 %). Based on the initial encouraging feedback from students, the amount of small real-life cases increased in this year to 3.

Didactics survey was conducted in addition to the usual student feedback, which has been administered automatically. There was no benefit offered for the students participating in the additional survey. Students were asked to participate in the didactics survey at the beginning of the upcoming academic year (with some months after the completion of the course and with final grades being already known to them). Responses were collected anonymously through the information system (the like of PeopleSoft). The average performance of the respondents in the course as well as their average student feedback did not differ from the results obtained on the overall class level. The questionnaire was administered in the language of the study program, which is Czech. The group of instructors on the course has been stable over the years. The performance as well as overall feedback collected from students was almost identical in both survey years.

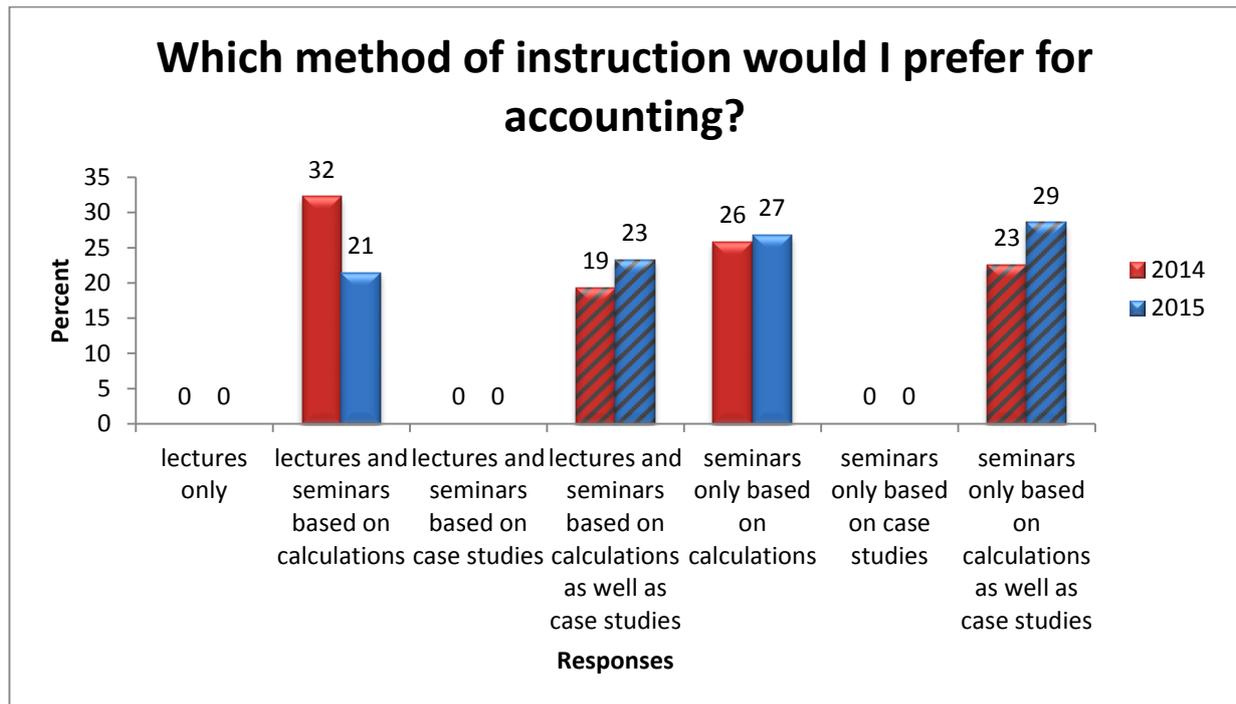
Results

In 2014, 39 % of respondents believed accounting was more among the easier disciplines in their curricula. For 19 %, accounting was on the more difficult side. A year later, 30 % found accounting easier and for 24 % it was among more difficult subjects (see Figure 1. For details).

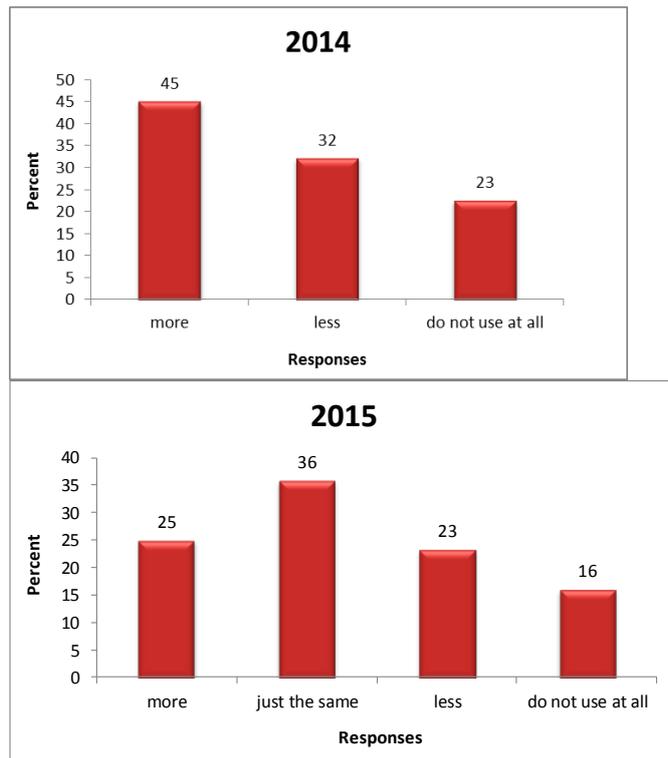
Figure 1. Perception of Accounting among Students

The key survey question was geared towards student preferences among various instruction methods (see Figure 2. for details). Between 2014 and 2015, the share of respondents, who would prefer any kind of involvement of small real-life case studies in the accounting instruction increased from 42 % to 52 %. Given the combination of lectures and seminars is the overall university-wide requirement for the introductory accounting course, with the greater proliferation of real-life small cases in the accounting course, the preference gravity among students shifted away from calculations (decrease from 32 % to 21 %) to the mixture of calculations and small cases (increase from 19 % to 23 %).

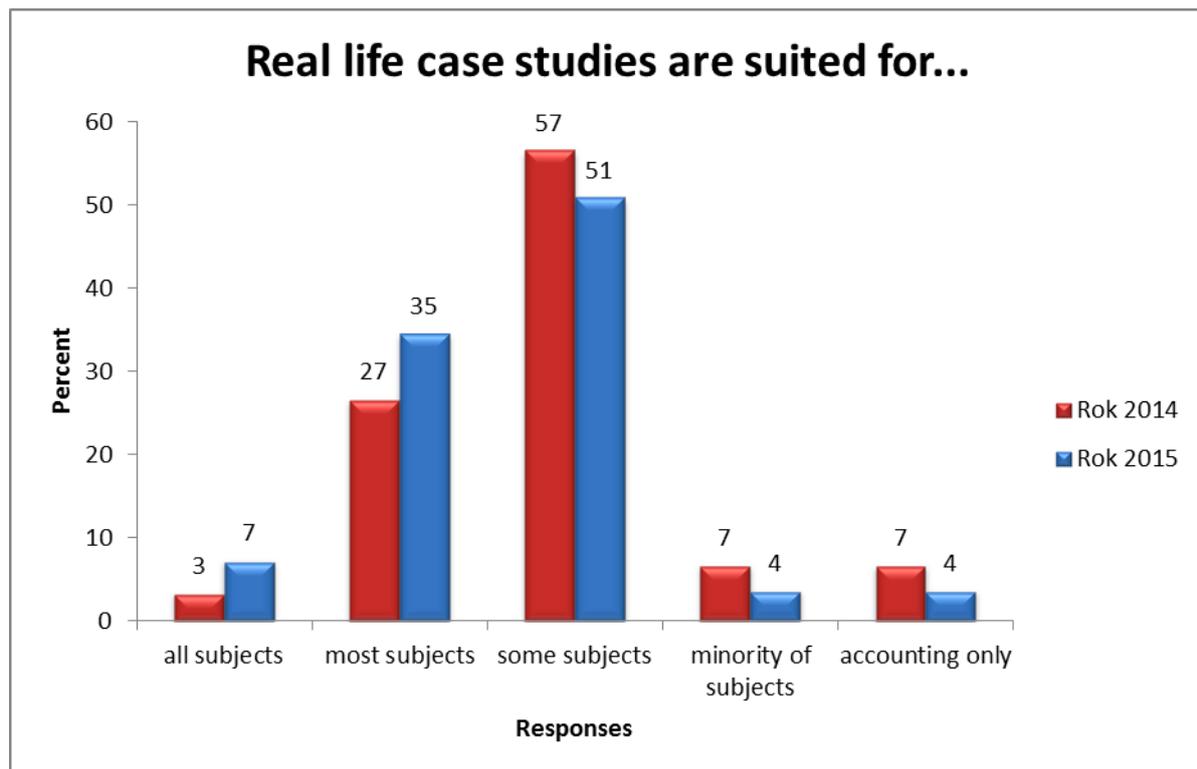
Figure 2. Perception of Various Instruction Methods among Students



Furthermore, we asked in particular about the amount of small real-life cases in the course (the scale was amended for 2015 by adding the option “just the same”). In 2014, 32 % did want the amount of small cases to be reduced and 23 % not to be used at all (in total 58 %). In 2015, when the amount of small real-life cases increased, “only” 39 % of respondents expressed their suggestion to reduce the amount (23 %) or not to use them at all (39 %). In addition, Figure 3. demonstrates that about a third of students (36 %) would like to keep the 3 small cases in the course and a quarter would even prefer a higher involvement of such a didactical tool.

Figure 3. Perception of Real Life Case Studies among Students

Among other issues, the post-course didactic survey inquired about the potential use of case studies in other subjects. Here, 14 % of respondents in 2014 and 8 % of respondents in 2015 deemed small real-life case studies fit for minority of disciplines or for accounting only, whereas 30 % in 2014 and even 42 % in 2015 believed small real-life cases could benefit the instruction of all or most subjects.

Figure 4. Transferability of Real Life Case Studies in Other Subject Areas

Conclusion

The results have been encouraging, although the method itself as well as further examination of its benefits is clearly needed. The survey in its present form has been limited to one school and one particular degree program only with no control group involved. It may well be that results for accounting major students would have been different. Future research could also address the effect of small real-life cases on student performance (grading) and/or student learning outcomes. The results are also conditioned by the small sample size and shall not be overgeneralized.

However, as other studies indicate (e.g. Hopkins et al., 2011), employer demands and student populations have been changing. Gradually more of our freshmen may look for novel or different approaches to teaching and learning, therefore asking for more similar approaches to small real-life cases, or simply wanting a greater variety in the instruction. The use of small real-life cases could assist explaining certain accounting phenomena in the given context. It might also transform the students in a way, in which they embrace a future leadership role and step into their desired profession for a while, or take a position of accounting professional or a critic observer (analyst). All of those personifications could help them on the journey of becoming a professional.

Experiencing a story brings a longer memory and creates important logical connections. Stronger and long lasting mental connections might be created to result in a larger mental map (Rock, 2009). Verifying and reflecting on real-life phenomena as well as critical understanding of written evidence have been one of the key components of the accounting profession. For instructors, making students more enthusiastic about the

material and living through more enjoyable classrooms could be one of the invaluable side effects.

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Appendix 1. Accounting Case Study

Profits of the Prague Public Transport Services Were Made through Accounting Operations

Adapted from ČTK (2012), retrieved on 10 October 2014 from <http://www.denik.cz/ekonomika/zisky-prazskeho-dopravniho-podniku-tvorily-prevazne-ucetni-operace-20120925.html>, translated from Czech

Profits of the Prague Public Transport Services for the year were largely created through accounting operations. The company was not in a good shape as it may seem on the first sight. Martin Dvořák, the CEO back then does not agree, however.

Business Daily Today reports the analysis of the former CFO for the company Mr. Michal Heřman: the company created reserves for maintenance in amount of 1.8 billion CZK between 2007 and 2009. Later on, only a quarter of the reserves was used for the intended purpose and the rest was dissolved in profits, although no new income was generated.

Dvořák does not agree with the analysis and suggests that the former CFO has not been familiar with the principles of reserve financing. According to John Smith from the National Accounting Institute in Prague, similar operations are legal, in spite of indicating that the company may face financial difficulties.

In the past, the Prague Public Transport Services outsourced to external providers various services, including maintenance for subway trains or IT. As a result, some of those services have become more costly.

Tasks for students:

- Comment of the statement of Mr. Smith that the operations may be a signal of other problems in the company.
- When and how was the creation of reserves accounted for? Did the creation of reserves affect receivables, payables, equity, taxes or other accounting items?
- Show on the balance sheet as of January 1, 2012, where reserves are to be found? Is it different for reserves created between 2007 and 2009?

Balance sheet as of January 1, 2012 (CZK)					
Assets	Brutto	Correction	Netto	Liabilities	Netto
Σ intangible assets				Σ equity	
Σ tangible assets					

Σ current assets				Σ other liabilities	
Total assets				Total liabilities	

d) How were the reserves accounted for throughout 2012 (dissolution of the reserves)?

Accounting operation	Ths CZK	Debtors	Creditors

e) How will it look then on the balance sheet?

Balance sheet as of June 30, 2012 (CZK)					
Assets	Brutto	Correction	Netto	Liabilities	Netto
Σ intangible assets				Σ equity	
Σ tangible assets					
Σ current assets				Σ other liabilities	

Total assets				Total liabilities	