ACTA UNIVERSITATIS AGRICULTURAE ET SILVICULTURAE MENDELIANAE BRUNENSIS

Volume 64 210 Number 6, 2016
http://dx.doi.org/10.11118/actaun201664061951

LEARNING OUTCOMES OF SIMULATION OF INSOLVENCY PROCEEDINGS INSPIRED BY THE US MOCK TRIALS

Martina Krásnická[1], Viktor Vojtko[2], Zdeněk Strnad[1], Rudolf Hrubý[1]

[1] Department of Law, Faculty of Economics, University of South Bohemia in České Budějovice, Branišovská 1645/31a, 370 05 České Budějovice, Czech Republic
[2] Department of Trade and Tourism, Faculty of Economics, University of South Bohemia in České Budějovice, Branišovská 1645/31a, 370 05 České Budějovice, Czech Republic

Abstract

KRÁSNICKÁ MARTINA, VOJTKO VIKTOR, STRNAD ZDENĚK, HRUBÝ RUDOLF. 2016. Learning Outcomes of Simulation of Insolvency Proceedings Inspired by the US Mock Trials. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis,* 64(6): 1951–1959.

The main aim of this paper is to quantify students' learning outcomes from a pilot project inspired by Mock trials developed in the USA and applied into the Czech system of law education of students of business disciplines. The pilot project involved a simulation of insolvency proceedings where the students played roles of various participants. The learning outcomes were evaluated in accordance to Bloom's taxonomy of learning objectives and findings support previous studies on this topic.
Our results generally confirm the findings of various studies saying that the teaching of basic concepts and terminology is more effective in the form of lectures and that main simulation as a pedagogy outcomes are in the affective and psychomotor domains. However, the differences in cognitive results of our students are very small as measured by an anonymous final test, which suggests that there are more factors to be considered and further studied.
The results also show that the students prefer the simulation method to the traditional lectures and perceive it as an efficient learning experience with long-term impact on their learning as well as attitudes and skills.
Such a study has not been done in the Czech environment and the findings enrich both business and law education theory and practice.

Keywords: simulation; mock trial; insolvency proceedings; company bankruptcy; law pilot project; education.

INTRODUCTION

There are many different approaches that could be used to develop students' knowledge and skills and the use of simulation, i.e. educational imitation of real-world situations and tasks, is one of them. But it is not the only one and it is necessary to understand benefits and limitations of an efficient simulation use in education.

In accordance to the Bloom's taxonomy of learning objectives learning outcomes can be identified in the following three domains (Bloom *et al.* 1959, Krathwohl, Bloom and Masia, 1964): cognitive (knowing), affective (feeling), and psychomotor (doing). Each of these domains has stages of learning unique to that domain. Research on the cognitive domain was aided by Gentry and Burns (1981), who provided descriptions of learning and the assessment process for the six levels in the cognitive domain – (1): basic knowledge, (2): comprehension, (3): application, (4): analysis, (5): synthesis, (6): evaluation – which should be supported by different tools and methods and also assessed differently. These descriptions have served as guides for researchers for the past 25 years.

The cognitive domain means to obtain and memorize terminology, factual knowledge, basic concepts, or principles, in other words the theory. The literature suggests that simulations' use is not a very efficient approach for such a task and traditional lectures and seminars could be more

efficient in this sense, at least from short-term perspective which is typically assessed.

But besides the basic knowledge, educators also typically hope to introduce students to the higher levels, i.e. to develop not only the knowledge but understanding and practical skills as well. The importance of such skills development is very often stressed by employers who expect graduates to be able to perform practically oriented tasks in their jobs. In this sense, the use of simulation has been long accepted as an active educational pedagogy that enables the students to acquire and develop such skills.

The second, affective domain basically includes improvement of students' attitudes toward the discipline and their greater involvement in the classroom work. For this perspective, literature suggests that active approaches such as simulation typically perform better in comparison to previously mentioned lectures.

Last but not least, the instructors using simulation as a learning method try to teach students to apply concepts and principles to make effective decisions by themselves and/or within the team (Anderson 2008). This reflects real world situations and adds an important context for the practical future use of acquired theoretical knowledge.

We think that another important aspect is the perspective of allowing the students to cross the threshold of partial knowledge. Although many theories and concepts are alone understood quite well by the students, the holistic understanding is often missing. It is quite common for anyone not just in education to have such an experience. It is in the very heart of learning to discover new knowledge on the basis of reconstructing the old one and change of meaning. For instance, Vojtko and Heskova (2010) define and propose a model of possible use of simulators supporting this managed change of meaning on the level of individual knowledge using falsification and re-construction of prior partial knowledge.

However, Anderson (2008) points out that it is still disappointing how little can be objectively demonstrated regarding what students learn from participating in simulation exercises and that we still are largely unable to document what simulation exercises accomplish in relation to the cognitive domain.

The essentially same conclusion reached earlier Greenlaw and Wyman (1973) and Wyman (1973). They said it is very difficult to compare and contrast learning that occurs within simulations because of the absence of control groups and wide range of classroom practices for using business simulations. In connection to their research Hsu (1989) suggested to have "clear and specific hypotheses on the specific learning objectives" that target managerial, technical, and problem-solving skills. Burns, Gentry and Wolfe (1990) also found an absence of rigorous research supporting the learning effectiveness of experiential methods such as business simulations. Gosenpud (1990) found studies that reported cognitive learning, but they either were based on perceptions of learning or they assessed the lower levels of the learning domain. The studies Gosenpud cited for assessing behavioural change/skill acquisition (the psychomotor domain) either suffered from ill-defined criterion measures or, again, were based on perceptions of behavioural change.

Within the affective learning the subsequent research expanded into attempting to assess what is learned from participating in a simulation, rather than simply the perception of whether learning occurred. The research on behavioural (psychomotor) change during simulations has been limited but it involves according to Anderson (2008) a number of studies that have focused on external validity by comparing success on a simulation with current business success. These longitudinal studies found some association between career success regarding salaries and promotions for students and performance on the simulation.

There are probably some other possible benefits of simulations' use in education. It was discovered that the interactive nature of simulations makes them ideal icebreakers and team-building exercises. Although, as far as we know, no recent published studies exist, it is entirely possible that judicious use of simulations may increase retention rates in study programmes. There is a body of literature to support the hypothesis that students who fail to become academically and socially integrated into academic programs are at high risk for dropping out of their programs (e.g. Ashar and Skenes 1993, Astin 1993, Tinto 1993).

Team learning situations in general provide another level of experience – interaction with the other team members, which raises the overall complexity. It is more similar to real-world circumstances (higher external validity) and human-human communication and emotions are involved. But again, it is a challenge to measure the impact. Team knowledge and individual knowledge are quite difficult to manage and cope with (lower internal validity) from the side of learning process and assessment. This may be one of the reasons why the before mentioned measurement of business simulations' impact on learning has so ambiguous results and seems to be so uneasy (Vojtko and Heskova 2010).

All categories of possible outcomes of using simulation have something in common; it has been difficult to devise a simple instrument and methodology that would measure the effectiveness of simulations and equally difficult to generalize the results of studies that assess the educational value of simulations (Anderson 2008).

However, there have been several recent studies (Huebscher and Lendner 2010, Duque and Weeks 2010, Avramenko 2012, Tiwari, Nafees and Krishnan 2014) that show how to systematically assess the impact of simulations and performance

of students. For the purpose of this paper it is necessary to especially mention van der Merwe (2013) who uses in his research a combination of simulation and case study in the accountancy teaching where the situation is similar and provides a comprehensible methodology for such an assessment, although only from short-term perspective.

In the context of law education and use of simulated trials, the American Mock Trial Association (www.collegemocktrial.org) began annual intercollegiate competitions in 1985. Business law professors have been writing scholarly articles about holding mock trials in their classrooms for almost as long (Bennett 1997, Lawton and Oswald 1993, Mann 1995, McDevitt 1998, Miller 1987). A purpose of the mock trial is to provide business students with the vocabulary and knowledge to interact with in-house counsel and outside counsel when disputes arise, just as students are educated about management information systems, not to become programmers, but to enhance their ability to work with professionals in the field (Miller 1987).

The benefits of mock trials according to various researchers (Karraker 1993, Lawton and Oswald 1993) include an improvement of critical thinking, increase of long-term retention of material, introduction to evaluations of the quality of evidence, promoting searches for cause-and-effect relationships, and forcing the pursuit of logical consistency. And also student evaluations of the mock trial experience are traditionally positive (Miller 1987). Newer studies related to mock trials educational efficiency seem to be missing although previous studies suggest further research.

When we take a look on the specifics of law simulations for business students, it is necessary to mention a study by Gershuny, McAllister and Rainey (2012). The purpose of the study was to assess student-learning experiences with respect to management decision-making before, during, and after a litigation process. The single largest shift in his survey was in the students' views of settlement. Prior to the mock trial, 68 % of the students completely disagreed with the consideration of an early settlement. After the mock trial, only 5 % remained firmly against settlement with the difference shifting to favour consideration. This movement indicates that mock trials could be a valuable learning experience to motivate settling instead of litigating disputes (Gershuny, McAllister and Rainey 2012).

However, Lawton (1997) argues that business students will become entrepreneurs and corporate managers who do not need to understand trials. Because 95 % of cases settle out of court, why waste time and effort studying the trial process?

From the literature review is quite clear, that the use of simulations in education might be beneficial if properly used, designed and assessed. In this context we would like to enhance the present knowledge by our experience with undertaking such a simulation in the context of law education of business students at the Faculty of Economics, University of South Bohemia in Ceske Budejovice. As far as we know, there is no such study in the Czech environment and we would like to fill in this gap.

For the purpose of this study we would like to test three hypotheses drawn from the above mentioned literature:

- H1: The performance of students who participated in the simulation (experimental group) measured by a final test will be worse than the performance of students who did not participate in the simulation (control group, traditional teaching).
- H2: The students who participated in the simulation will have a positive attitude towards the simulation educational method.
- H3: The students who participated in the simulation will have a positive attitude towards the insolvency topic.

MATERIALS AND METHODS

To test the above mentioned hypotheses, we have used an experimental design based on posttest with a control group. Due to the subject limitations it was not possible to randomly split students into experimental and control group, we had to follow their affiliation with study programmes.

Fifty students of the study program Accountancy and Financial Management of Enterprise and three students of Economic Informatics formed the first experimental subgroup (UFRP), while the students of Management of Commerce study programme (OP) gave rise to the second experimental subgroup. As a part of the simulation they competed in a case of insolvency proceedings of the company.

Thirty remaining students of the study programme Management and Business Economics (REP) were taught in classically led seminars. They served as a control group for the test on the efficiency of simulation of insolvency proceedings as the new teaching method.

The independent variables in our experiment were according to H1 the performance in the final test, according to H2 the students' attitude towards the simulation educational method and according to H3 the students' attitude towards the insolvency topic. The dependent variable was the simulation experience. In order to evaluate how effective this method was the students participated in a survey that involved an anonymous final test and a questionnaire.

The first task for the students involved in the experimental groups was to assess whether a company failure met criteria of being in bankruptcy according the Czech Insolvency Act, i.e. a situation the graduates of the Faculty of Economics can easily face in their practice. For this purpose, a case study of a construction company was prepared and introduced to the students.

In the next phase, students of both experimental groups were randomly divided into three subgroups – "debtors", "secured creditors" and "unsecured creditors". Each of the subgroups was asked to take its' position in the abovementioned case of the construction company failure and try to defend it before a jury better than the same subgroup from the other experimental group.

The simulation itself was then carried out at the premises of the Regional Court in Czech Budejovice. The jury consisted of a real judge, two insolvency practitioners, three members of the Department of Law and one member of the Department of Trade and Tourism of the Faculty of Economics. The jury for the individual subgroups evaluated the quality of insolvency proposals (submitted by the debtor subgroups) and insolvency applications (submitted by secured and unsecured creditors subgroups). Subsequently they judged queries to an insolvency practitioner (played by the real insolvency practitioner) asked by all subgroups, the creditors' voting on the choice of their new insolvency practitioner and on the procedure of solving the debtor's failure.

The guarantor of the subject Business Law II then prepared the anonymous test. She led the control group and participated in the simulation only as a jury member. It contained ten ABC type questions. The test was given to both experimental groups and to the control group after the simulation had been finished and without prior notice. The aim of the test was to evaluate and compare the level of cognitive skills at the first and second level of Bloom's taxonomy of learning objectives, i.e. the basic knowledge and comprehension.

The questionnaire using 5-point Likert scales (1 = Strongly disagree, 3 = Don't know, 5 = Strongly Agree) was created in order to evaluate students' feelings towards the insolvency in terms of Bloom's taxonomy of affective learning and was inspired by a questionnaire developed by van der Merwe (2013). The last part of the questionnaire gathered qualitative remarks from students. Results were coded to an electronic form and analyzed using R and MS Excel software packages.

RESULTS

Cognitive domain – learning outcomes from the final test

As mentioned above, the goal of the anonymous test was to assess the efficiency of simulation on the cognitive outcomes of the students. Therefore, the control group that did not participate in a simulation of the insolvency proceedings filled it in as well.

A difference in the overall results between experimental and control groups was quite small. The control group, whose participants were taught by classic seminars, had an average of 7.90 correct answers and the experimental group 7.64. Therefore, the *hypothesis H1 can be approved on the participating student population*. If we statistically test the difference, it is not statistically significant (linear model p-value = 0.472) and thus the difference is very small to be generalized to a broader population. We cannot therefore fully confirm or refuse the findings of various studies summarized by Anderson (2008) saying that the teaching of basics concepts and terminology is more effective in the form of lectures and seminars but the findings generally support that, even though very weakly.

Interesting results were found in the individual questions. As also noted above, the test questions were prepared by the subject guarantor, who did not participate in the simulation of insolvency and led the control group in a traditional way. The subject of the traditional seminars was mainly to prepare an insolvency proposal and to fill in an insolvency application.

This resulted in statistically significant differences between the experimental group and control group (for $\alpha = 0.05$, tested by χ^2 test). In question No. 8, which was related to the insolvency application, the control group answered correctly in 53.3 % of cases, experimental group in 30.2 % (χ^2 test p-value = 0.037). A similar situation occurred in question No. 5 on the proposal for insolvency (χ^2 test p-value = 0.028). The students of the control group answered it correctly in 87 % compared to 64 % correct answers in the experimental group.

The opposite situation occurred in the case of questions No. 1 and 3. The control group did not answer the question No. 3 correctly in 30 %, while the failure at experimental group was only 7.5 % (χ^2 test p-value = 0.007). The question concerned the legal conditions of over-indebtedness, which was solved within the simulation in the preparatory phase, finding out whether the company is insolvent or not. The question No. 1 relating to the process of finding the procedure of solving the company insolvency was not addressed during the preparation for simulation of insolvency proceedings at all. However, during the actual simulation in which students play roles of insolvency proceedings participants the different groups of creditors voted on it. Thus, this question was only introduced to students as part of the game and the experimental groups answered it correctly in 94.3 % compared by 73.3 % of correct answers in the control group (χ^2 test p-value = 0.007).

Similar results can be observed in other issues, although the differences are not statistically significant. Thus, in our case we can suggest that students receiving information from different teachers are able to remember the emphasized data even without preparation for the test.

Affective outcomes from the questionnaire

The most obvious benefits of the simulation for our students based on their own evaluation is related to their increased knowledge (M = 4.51, question No. 5), their increased insight into the relationship

I: *Differences in the final test answers amongst experimental and control group (n = 83).*

Test question	Proportion of right answers – experimental group	Proportion of right answers – control group	χ^2 test p-value
1	94.3 %	73.3 %	0.007
2	96.2 %	86.7 %	0.106
3	92.5 %	70.0 %	0.007
4	81.1 %	90.0 %	0.286
5	64.2 %	86.7 %	0.028
6	88.7 %	93.3 %	0.490
7	47.2 %	66.7 %	0.087
8	30.2 %	53.3 %	0.037
9	79.2 %	93.3 %	0.090
10	90.6 %	76.7 %	0.084

between theory and practice (M = 4.43, question No. 6), their effective learning experience (M = 4.40, question No. 4) and their deeper understanding of real-life practices (M = 4.34, question No. 7). Our students prefer such simulation instead of traditional lectures (M = 4.70, question No. 25) and they also enjoyed the social aspects of the simulation (M = 4.30, question No. 22).

Negative students' perceptions (mean below the neutral score of 3) are related to the development of their time management skills (M = 2.87, question No. 20), their motivation to become a qualified manager (M = 2.75, question No. 14), the development of their presentation skills (M = 2.75, question No. 18), the development of their stress management skills (M = 2.64, question No. 24) and the development of their language skills (M = 2.28, question No. 21).

The open question asking what was the biggest benefit from the simulation of insolvency proceedings showed generally positive attitude towards this teaching method especially because of an experience close the real life. 64 % of respondents appreciated that they could have seen how the court had worked in practice. 12 % of students pointed out a better understanding of the insolvency proceedings. The appreciation of the teamwork was surprisingly low (4 %).

These findings support both hypotheses *H2 and H3 which can therefore be approved on the participating student population* (respective mean values > 3).

Further analysis of the student feedback in the form of the questionnaire obtained after the assignment showed one statistically significant difference in answers according to gender as tested by linear model for $\alpha = 0.05$. It was for the question No. 11 and in this case males would be interested in the area of bankruptcy more than females.

Differences between the study programmes

Some interesting differences between the student's results of various study programmes were observed too. Accountancy and Financial Management of Enterprise (UFRP) students were more proficient in matters concerning the formal correctness of the whole process of insolvency while students of Management of Commerce (OP) exceled more in creativity and ability to cope without not knowing the correct answer.

These observations were made based on analyzing the test results and were also evident in the qualitative evaluation of individual groups by the jury, which is not a subject of this paper.

Regarding the questionnaire, it is apparent from the Fig. 1 that students of UFRP were more satisfied with this method of teaching (Question No. 1) and were also generally answering with higher scores in majority of other questions. This differences were further tested by linear model which showed statistical significance with p-values < 0.05 for several of the questions (i.e. questions No. 2, 4, 8, 9, 10, 12, 19, 20, 22 and 23). An explanation of these differences may be, apart from personality features, due to the fact that the UFRP students have generally less experience with the simulation method than the students of OP and thus are enjoying it more and take it more seriously.

DISCUSSION

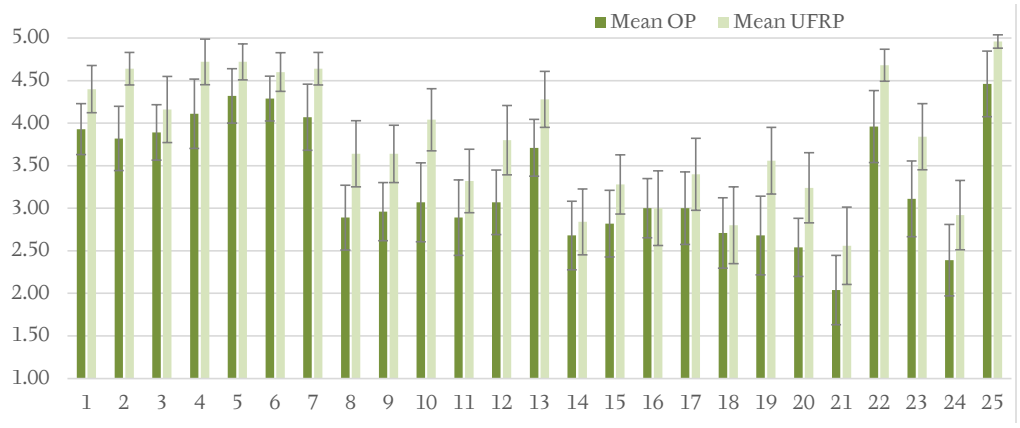
As the questionnaire was identical to the one of the South African undergraduate accountancy students that were assigned by van der Merwe (2013) we have compared their results with our students of Accountancy and Financial Management of Enterprise (UFRP) at our university. The results are available in Fig. 2.

From South African students' point of view, the most obvious benefits of the simulation were related to the level of learning and the exposure to real-life accountancy practice. Fig. 1 shows that there were no generally negative perceptions (no mean below the neutral score of 3). The lowest students' evaluation was related to their preferences of such simulation compared to traditional lectures (M = 3.38, question No. 25).

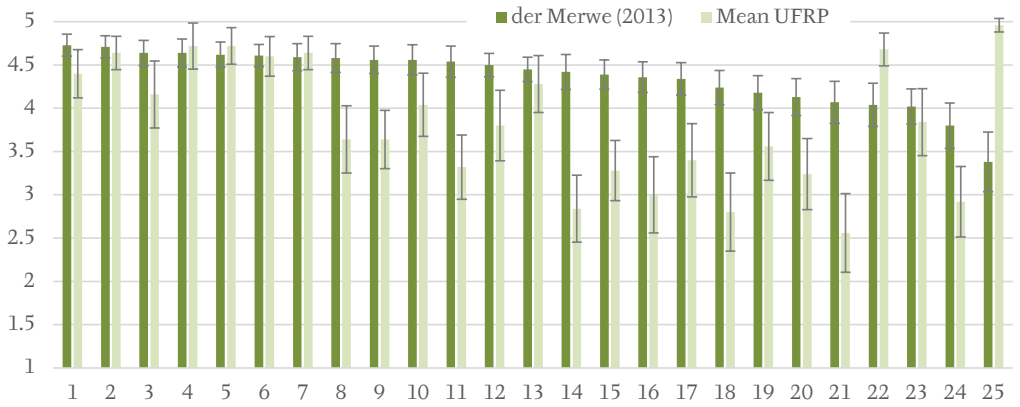
Compared with South African students, our students had higher scores in five questions (questions No. 4, 5, 7, 22 and 25). The biggest difference occurred in question No. 25 concerning

II: *Survey results (n = 53).*

	Question	Mean	Std deviation
25.	**I prefer such simulation of insolvency proceedings instead of lectures.**	4.70	0.80
5.	**The simulation of insolvency proceedings increased my knowledge.**	4.51	0.75
6.	**The simulation of insolvency proceedings increased my insight into the relationship between theory and practice.**	4.43	0.67
4.	**The simulation of insolvency proceedings was an effective learning experience.**	4.40	0.97
7.	**Participating in the simulation of insolvency proceedings broadened my understanding of real-life practice.**	4.34	0.88
22.	**I enjoyed the social aspects of the simulation of insolvency proceedings.**	4.30	0.95
2.	**I took the simulation of insolvency proceedings seriously.**	4.21	0.91
1.	**What I have learned during the simulation of insolvency proceedings will stay with me in the long run.**	4.15	0.79
3.	**Participating in the simulation of insolvency proceedings broadened my view of the role of a manager.**	4.02	0.93
13.	**The simulation of insolvency proceedings demanded application from me and not only knowledge replication.**	3.98	0.91
10.	**Participating in the simulation of insolvency proceedings developed/enhanced my teamwork skills.**	3.53	1.20
23.	**Participating in the simulation of insolvency proceedings developed/enhanced my soft skills in general.**	3.45	1.15
12.	**I was motivated by the simulation of insolvency proceedings.**	3.42	1.08
9.	**Participating in the simulation of insolvency proceedings enhanced my formulation of opinions skills.**	3.28	0.95
8.	**The simulation of insolvency proceedings tested my ability to think for myself.**	3.25	1.07
17.	**Participating in the simulation of insolvency proceedings developed/enhanced my formulation of opinions skills.**	3.19	1.13
11.	**My interest in the area of bankruptcy has been enhanced by the simulation of insolvency proceedings.**	3.09	1.10
19.	**Participating in the simulation of insolvency proceedings developed/enhanced my report writing skills.**	3.09	1.21
15.	**Participating in the simulation of insolvency proceedings developed/enhanced my research skills.**	3.04	1.00
16.	**Participating in the simulation of insolvency proceedings developed/enhanced my communication skills.**	3.00	1.02
20.	**Participating in the simulation of insolvency proceedings developed/enhanced my time management skills.**	2.87	1.04
14.	**I am now more motivated to become a qualified manager because of the simulation of insolvency proceedings.**	2.75	1.04
18.	**Participating in the simulation of insolvency proceedings developed/enhanced my presentation skills.**	2.75	1.12
24.	**Participating in the simulation of insolvency proceedings developed/enhanced my stress management skills.**	2.64	1.11
21.	**Participating in the simulation of insolvency proceedings developed/enhanced my language skills.**	2.28	1.15



1: *Comparison of question answer means – OP and UFRP including 95 % confidence intervals*



2: *Comparison of question answer means – van der Merwe (2013) and UFRP including 95 % confidence intervals*

students' preferences of such simulation compared to traditional lectures. From our students' point of view, this was the most positively perceived question (M = 4.96) while South African students' perception of this question was the lowest (M = 3.38). A significant difference also occurred in question No. 22 concerning the social aspects of the simulation that our students perceived more positively (M = 4.68) than South African students (M = 4.04).

On the opposite, South African students had significantly more positive perception of the question No. 14 concerning the motivation to become a qualified accountant/manager because of the simulation (M = 4.42) than our students (M = 2.84) – probably due to the closer relation of simulation topic with their field of study. Another significant difference also occurred in the question No. 21 concerning the development of language skills that South African students perceived more positively (M = 4.07) than our students (M = 2.56).

CONCLUSION

In our study, we have assessed the learning outcomes of simulation of insolvency proceedings from the both Bloom's taxonomy of learning objectives cognitive and affective domains' perspectives, which was recommended by previous mock trial studies (Gershuny, McAllister and Rainey 2012). In accordance with the recommendation of Greenlaw and Wyman (1973) we have also involved a control group for the measurement of effectiveness of the learning outcomes in a form of an anonymous, "out of the blue" test. For the purpose of affective domain perspective, we have used a methodology proposed by van der Merwe (2013).

Our results generally confirm the findings of various studies summarized by Anderson (2008) saying that the teaching of basic concepts and terminology is more effective in the form of lectures and that main simulation as a pedagogy outcomes are in the affective and psychomotor domains. However,

the differences in cognitive results of our students are very small as measured by an anonymous final test which suggests that there are more factors to be considered and further studied.

The results also show that the students prefer the simulation method to the traditional lectures and perceive it as an efficient learning experience with long-term impact on their learning as well as attitudes and skills. This supports further use of this method in business and also law education where the traditional business and law case methods with a mock trial can help to inspire students, build strong peer relationships, and provide an active learning experience. It could also help to show practical relevancy of study programmes to potential students as well as employers.

There are of course certain limitations of this study. One of them is the use of nonrandomized experimental and control groups and measurement of short-term impacts only using test and survey questions. And the quantitative approach can definitely cover only partially some of the most valuable moments in the simulation experience, e.g. the excitement of students experiencing own simulated and real insolvency proceedings in the environment of the premises of the Regional Court in Czech Budejovice.

We would like to proceed further with this research in the next academic year when the student experience is going to be enriched by a combination with another subject – business simulation. Results from the business simulation where students try to manage a company are often fulfilling criteria of insolvency proceedings and this will form a base for future cases in the Business Law II subject.

Acknowledgements

This work was supported by the Ministry of Education, Youth, and Sport of the Czech Republic – university specific research.

REFERENCES

ANDERSON, P. H. and LAWTON, L. 2008. Business Simulations and Cognitive Learning: Developments, Desires, and Future Directions. *Simulation and Gaming*, 40(2): 193–216.

ASHAR, H. and SKENES, R. 1993. Can Tinto's student departure model be applied to nontraditional students? *Adult Education Quarterly*, 43(2): 90–100.

ASTIN, A. W. 1993. *What Matters in College? Four Critical Years Revisited*. Jossey-Bass Higher and Adult Education Series.

AVRAMENKO, A. 2012. Enhancing students' employability through business simulation. *Education and Training*, 54(5): 355–367.

BENNETT, R. B., LEIBMAN, J. H. and FETTER, R. E. 1997. Using a Jury Simulation as a Classroom Exercise. *Journal of Legal Studies Education*, 15(2): 191–210.

BLOOM, B. S., ENGLEHART, M. D., FURST, E. D., et al. 1959. *Taxonomy of educational objectives: The classification of educational goals. Handbook 1: The cognitive domain*. New York: David McKay.

BURNS, A. C., GENTRY, J. W. and WOLFE, J. 1990. A cornucopia of considerations in evaluating the effectiveness of experiential pedagogies. In GENTRY, J. W. (Ed.). *Guide to business gaming and experiential learning*. East Brunswick, NJ: Nichols/GP Publishing, 253–278.

DUQUE, L. C. and WEEKS, J. R. 2010. Towards a model and methodology for assessing student learning outcomes and satisfaction. Quality Assurance in Education, 18(2): 84–105.

GENTRY, J. W. and BURNS, A. C. 1981. Operationalizing a test of a model of the use of simulation games and experiential learning. *Developments in Business Simulation and Experiential Learning*, 8: 48–52.

GERSHUNY, P., MCALLISTER, C. and RAINEY, C. 2012. Mock Trials Versus Management or Litigation-Driven Models of Business Law Instruction. *Journal of Education for Business*, 87(4): 193–197.

GOSENPUD, J. J. 1990. Evaluation of experiential learning. In GENTRY, J. W. (Ed.). *Guide to business gaming and experiential learning*. East Brunswick, NJ: Nichols/GP Publishing, 301–329.

GREENLAW, P. S. and WYMAN, F. P. 1973. The Teaching Effectiveness of Games in Collegiate Business Courses. *Simulation and Gaming*, 4(3): 259.

HSU, E. 1989. Role-Event Gaming Simulation in Management Education: A Conceptual Framework and Review. *Simulation and Games*, 20(4): 409–38.

HUEBSCHER, J. and LENDNER, C. 2010. Effects of Entrepreneurship Simulation Game Seminars on Entrepreneurs' and Students' Learning. *Journal of Small Business and Entrepreneurship*, 23(4): 543–554.

KARRAKER, M. W. 1993. Mock trials and critical thinking. *College Teaching*, 41(4): 134.

KRATHWOHL, D. R., BLOOM, B. S. and MASIA, B. B. 1964. *Taxonomy of educational objectives: The classification of educational goals. Handbook II: The affective domain*. New York: David McKay.

LAWTON, A. 1997. Using a Management Driven Model to Teach Business Law. Journal of Legal Studies Education, 15(2): 211–235.

LAWTON, A. M. and OSWALD, L. J. 1993. The use of simulated hearings in business law courses. *Journal of Legal Studies in Education*, 11: 103–126.

MANN, S. K. 1995. A Simulated Hearing Modified for Teaching Business Law to Graduate Business

Students. *Journal of Legal Studies Education*, 13(2), 311.
MCDEVITT, W. J. 1998. Three Ready-to-Use Mock Jury Trials for the Classroom. *Journal of Legal Studies Education*, 16(1): 149–171.
MILLER, C. J. 1987. Mock Jury Trial: A Model for Business Law I Courses. *Journal of Legal Studies Education*, 6(1): 91.
TINTO, V. 1993. *Leaving college: rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
TIWARI, S. R., NAFEES, L. and KRISHNAN, O. 2014. Simulation as a pedagogical tool: Measurement of impact on perceived effective learning. *The International Journal of Management Education*, 12(3): 260–270.
VAN DER MERWE, N. 2013. An Evaluation Of An Integrated Case Study And Business Simulation To Develop Professional Skills In South African Accountancy Students. *The International Business and Economics Research Journal*, 12(10): 1137.
VOJTKO, V. and HESKOVÁ, M. 2010. Constructivist Use of Business Simulators in Education. *Communications of the IBIMA*, 1–11.

Contact information

Martina Krásnická: mkrasnicka@ef.jcu.cz
Viktor Vojtko: vojtko@ef.jcu.cz
Zdeněk Strnad: zstrnad@ef.jcu.cz
Rudolf Hrubý: hruby@ef.jcu.cz