

It Doesn't Matter How We Assess the Competencies in Accounting Education?

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Summary:

Currently, the accounting profession has lost its privilege of self-regulation. Accounting education is also plagued with many problems. The issue how to assess professional competencies achieved by the end of the accounting undergraduate education – using a paper-based or a computer-based exam – cannot solve any of these problems. However, it remains an important one, because it draws attention to the roots of the problems – the crisis in the accounting profession's values. While the value proposition of the other learned professions (i.e. how a profession provides benefits to society at large) is based on the commitments of their members to serve the broad public interest, in accounting we have two conceptually different value propositions. The Pathways Commission (2012) defines it broadly – in terms of the role of accounting in the wider society, Lawson et al. (2014; 2015), however, propose a weaker value proposition defined in terms of the role of accounting in adding value to the individual organizations. The choice among these statements is critical for the future of accounting education and the profession.

The paper suggests that *what values* one teaches is equally important to considering *how* we assess the level of competencies students have achieved. In seeking to

expound this thesis, the paper explores the need for a broad societal perspective on the accounting's value proposition as well as the implications this proposition has for reforming accounting higher education. A shift in the focus of ethics courses and a shift in the teaching strategies applied offer the best hope for fulfilling the advanced promise of the accounting profession and its education. However, this entirely qualitative study suggests that in testing students' ethical reasoning capacity – the core driver of the commitments to the profession's ideal – computer-based exams appear to be as (ir)relevant as the paper-based exams.

Key words: higher education, accounting, value proposition, ethics, teaching strategies.

JEL Classification: M40, I20.

1. Introduction

No doubt, the issues concerning the methods and forms of assessing the learning outcomes are important in every educational model, especially in higher vocational education, and the accounting profession among others. Still, doubts remain as to whether the question of how to better assess the achieved level of competencies by the end of an education degree – using a paper-based or a computer-based exam – is the most important one within the accounting curriculum.

There are at least two major reasons

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why the assessment of learning outcomes is not overarching. The first one is that these issues are dependent on other elements included in the curriculum, which seem to be the key in overcoming the perceived problems with accounting education. The accounting academic plan includes the following elements: purpose, content, sequence, learners, instructional processes, instructional resources, assessment, and adjustment (Stark and Lattuca, 1997, pp. 9–16). In terms of these elements, solving the problems with the educational model is a question of improvements in the weakest of these elements and not just a matter of change in the final state exam.

Which element of the accounting curriculum is currently the weakest one? The answer to this question is deeply rooted into the problems accounting education faces today. In the U.S. the most crucial among them are the declining students enrollments, the questioned value-added of accounting education, the irrelevant curriculum models as well as the flawed pedagogies (Albrecht and Sack, 2000, pp. 19–58). Unfortunately, the situation in accounting higher education in Bulgaria is very similar. The University of Economics – Varna, for example, reports a declining enrollment in its accounting program for the last decade as well as some problems with the quality of accounting education (Donev, 2014, p. 17) that are not uncommon in many of the other business universities in the country (Pergelov, 2007, p. 5). These problems suggest that to improve accounting education, we should start with redefining the purposes and the values of the educational model – the first element of the academic plan. The proper definition of *the goals and the priority of accounting education* could help in adding value to the accounting programs, in subsequent improvements of the pedagogies and surely in overcoming the declining students enrollment.

The second, and probably, more important reason why the assessment issues are not paramount, is that the problems the accounting profession faces today cannot be solved only with a change in how we assess future professionals. The lost right of the profession to self-regulation (see Van Wyhe (2007) for a historical background) occurred because accounting practice failed to fulfil the promise of the profession, not because it failed in exercising some technical skills. Thus, the expectations of the accounting profession for the practitioners are closely related not just to their technical competencies, which could easily be tested (in one way or another), but also with *the profession's values shared by the members*. These values could be taught to the aspiring members of the profession (if properly defined and included in the curriculum), but their assessment seems to be equally problematic – in terms of a paper-based, as well as, in terms of a computer-based exam.

Although assessing the learning outcomes appears to be a question of secondary importance to the perceived crisis in the values underpinning the accounting profession and its education, it remains an important one for two other reasons. First, being at the end of the academic plan, this question allows for a discussion of all other key elements, especially the purposes and the priority of the educational model. Actually, the definition of the goals of education and the resulting learning outcomes are preconditions for the subsequent assessment of these outcomes. Second, being at the entrance of the student's professional career path, the issues concerning the final state exam inevitably address the questions about the expectations of the profession for its future members. It is therefore likely that the assessment issues could facilitate the discussion of the overarching values of the accounting profession.

The paper seeks to contribute to the debate on the problems of accounting education by sharing some of what we – the Department of Accounting and Analysis at the University of National and World Economy, Bulgaria – have concluded in discussions about a paper-based versus a computer-based state exam in accounting, in hope that some of the ideas might be useful to other higher education institutions. The paper suggests that *what values* one teaches is equally important to considering *how* we assess the level of competencies students have achieved. In seeking to expound this thesis, the paper explores the need for a broad societal perspective on the accounting's value proposition – how accountants provide benefit to society at large – as well as the implications this proposition have for reforming higher education in accounting.

Though the discussion of the state assessment activities was a team effort, the analysis, views, and opinions expressed are those of the author and do not necessarily reflect any official position. However, because of the qualitative research methodology and the sound deductive reasoning applied, the findings of this study are relevant not only to the educational model in accounting, but to a more general context.

The remainder of the paper is organized as follows. The next section critically discusses two recently suggested accounting's value propositions and explores the need for a broad societal value proposition for the future of the profession and its education. Relevant examples of other professions' ideals are also presented. The third section contains a suggestion for an educational reform to make the profession's ideal more easily achievable by making it an educational priority. The last section makes a comparison with

previous recommendations for reforming accounting higher education in Bulgaria and discusses the (ir)relevance of the paper-based versus computer-based assessment debate in the context of the students' commitments to the profession's values. The paper concludes with a brief summary.

2. The Value Proposition for the Accounting Profession

A profession is much more than a job or an occupation. It is a relationship not just between the person as a member of a community and the community itself, but merely a relationship between the person or the community and the needs of the society at large. This relationship and its reciprocal nature are usually described by the concept of the "social contract" – the implicit contract between the profession and the public. Within this social contract, the profession is granted a substantial autonomy and the privilege of self-regulation in exchange for a commitment to the profession's core values which inevitably protect the broad public interest. These values are what builds the foundations and the identity of the professions. They show, for example, why the profession exists and is important, what are the profession's obligations, what will be the consequences of a failure to meet the public expectation, what should be the educational priority, among others.

The articulation of the profession's values implied by the social contract in an explicit statement is widely known as a value proposition for the profession. Any value proposition could be only partially captured by the extant legal documents – e.g., the laws and the rules that govern the profession. It is merely an issue of ethical tenets which goes well beyond the remote ethical guidance for practitioners produced by the profession itself.

2.1. Value propositions for the learned professions

In all professions (medicine, engineering or the legal profession, among others) the value propositions are derived on the basis of the expectations the professions hold for themselves and their members. They are very similar among the professions, not surprisingly.

In medicine, for example, the profession's commitments are not only to the individual patients, but to the welfare of the society at large. The Declaration of Professional Responsibility: Medicine's Social Contract with Humanity adopted by the American Medical Association (AMA) recognizes that "humanity is our [medicine's] patient" (AMA, 2001). Well beyond the responsibilities directly associated with the medical profession, its value proposition includes a commitment to some key civic values: it is the advocacy of "social, economic, educational, and political changes that ameliorate suffering and contribute to human well-being" (AMA, 2001). Similarly, it has been widely recognized that the values that guide the medical profession and underpin all its principles and policies include "compassion", "service", "altruism", and "trustworthiness" (College of Physicians and Surgeons of Ontario (CPSO), 2011 [2003]; 2012 [2003]).¹

The profession of engineering in all its branches has also always been devoted to the service of the broad public interest. Tredgold's (1828) traditional definition of engineering recognizes the profession as "the art of directing the great sources of power in nature for the use and convenience of [human beings]". Today this understanding has become

the foundation on which the mission of the Institute of Electrical and Electronics Engineers (IEEE) – the world's largest technical professional organization – is grounded. IEEE's mission is to "foster technological innovation and excellence for the benefit of humanity" (IEEE, 2015), i.e. for the advancement of society at large. In implementing its mission the organization commits to a number of core values (e.g., "trust", "growth and nurturing", "global community building", "partnership", "integrity in action"), among which it recognizes the importance of the "service to humanity" – that is, "leveraging science, technology, and engineering to benefit human welfare" (IEEE, 2015).

Traditionally, the legal profession has also been related to the common good. According to Pound (1953, p. 5) what once gave rise to the legal profession was the commitment to the public benefit: "public service is the primary purpose" of the legal profession and it is "no less a public service because it may incidentally be a means of livelihood". The ideal of the legal profession has been legal services, which, while frequently being directed toward an individual client, to keep community needs as their end in view. That is, "the welfare of the greater community is both an immediate and long-term beneficiary" of the legal profession (Bennett, 2001, p. 88).

In summary, what these examples in the other learned professions indicate is that the value proposition in each one of them is based on the commitments of the profession and its members to provide a broad common benefit to society. What should then be the value proposition for the accounting profession?

¹According to CPSO compassion is the foundation of the relationship between the patient and the physician. Service is not just an application of a package of competencies when implementing the professional responsibilities; it means "putting the patient first". Altruism recognizes that the patient's needs are paramount; it is "the highest commitment to service". What integrates these core values is the trustworthiness – "the demonstration of compassion, service and altruism that earns the medical profession the trust of the public" (see: <http://www.cpso.on.ca/>).

2.2. Two recently suggested value propositions for the accounting profession

Recently, two value propositions for the accounting profession have been suggested by world leading organizations of academicians and/or practitioners, which do not seem to be coextensive with one another. The first of these statements belongs to the Pathways Commission on Accounting Higher Education (the Pathways Commission). It was formed in 2010 between the American Accounting Association (AAA) and the American Institute of Certified Public Accountants (AICPA) to address the issues of higher education for the accounting profession and develop recommendations for its future. In its final report the Commission bases all its recommendations on the following value proposition of the accounting profession:

The accounting profession's value proposition rests on the ability and willingness of its members to serve the broad public interest associated with reliable accounting information. This value proposition, ..., begins with personal integrity and intelligence, builds on this foundation with a lifelong commitment to a highly developed base of technical knowledge and professional skills, and applies these practical skills with a deep sense of and commitment to the accounting profession's ethical standards and practice as well as its broad societal and economic purposes. (Pathways Commission, 2012, p. 23)

The proposed value proposition is derived on the fundamental premise that "the educational preparation of accountants should rest on a comprehensive and well-articulated vision of the role of accounting in the wider society" (Pathways Commission, 2012, p. 21). The role of accountants

is primarily seen as trustees of reliable accounting information which is central to the functioning of capital markets and to the implementation of all economic activities, because it ensures confidence and trust. Without them, the communication in business would be severely hampered, the efficiency of markets would be lost, the allocation of resources around the globe would be less effective, in a word, "the global prosperity would become something less than an attainable goal" (Pathways Commission, 2012, p. 22). That is why, this value proposition is the foundation of the fundamental principles embedded in the Code of Ethics For Professional Accountants, developed by the International Ethics Standards Board for Accountants (IESBA, 2016, § 100.1):

A distinguishing mark of the accountancy profession is its acceptance of the responsibility to act in the public interest. Therefore, a professional accountant's responsibility is not exclusively to satisfy the needs of an individual client or employer.

The second statement of the accounting's value proposition belongs to the joint Curriculum Task Force, convened in 2010 by the Management Accounting Section (MAS) of the AAA and the Institute of Management Accountants (IMA). It was charged with the responsibility to develop curricular recommendations for all accounting students and thus its initiatives are responsive to the Pathways Commission's (2012, p. 13) call "to define the body of knowledge that is the foundation for accounting's curricula of the future". In its reports (Lawson et al., 2014; 2015), this Task Force echoes the Pathways Commission's recommendation that future educational model for all accounting graduates be based on the accounting's value proposition. However, the profession's value proposition receives the following new definition:

The Task Force proposes that accounting's value proposition be defined in terms of strategy formulation and analysis, planning, and execution.

A convenient summary phrase for how professionals can add organizational value is Enterprise Performance Management (EPM). EPM involves the integrated use of methods to enhance organizational value by coordinating strategy formulation and analysis, planning, and execution. EPM includes accounting and management practices (e.g., strategy maps, budgeting, forecasting, and incremental cash-flow analysis) and linkages among systems (e.g., strategic planning, customer relationship management, supply chain management, enterprise risk management [ERM], human capital management, and lean management). (Lawson et al., 2014, p. 298)

Lawson et al., (2015, p. 150) believe that the suggested value proposition for the accounting profession, that includes different aspects of strategy development and implementation, is "broadened conceptually", but this statement seems to be a little tenuous. While the Pathways Commission (2012, pp. 21–23) implies a broader understanding of the profession's value proposition in terms of "the role of accounting in the wider society" and "the commitments implicit in the profession's social contract", Lawson et al. (2014, p. 298) define it in terms of the "enterprise performance management". This seems to represent a shift in the focus – from a value proposition based on the broad societal and economic purposes of the profession to a proposition reduced to the utilitarian aspirations for adding value in individual organizations. Now, there is a sense that the interest of the society is of the second order – a position which has never been

supported in any of the other learned professions (medicine, engineering or the legal profession). The recommendation future educational models in accounting higher education to be based on this value proposition is crucial and it prompts the more structured reasoning of the broad societal perspective on the accounting's value proposition that follows.

2.3. The need for a broad societal perspective on the accounting's value proposition

If managing enterprise performance directly contributes to serving the broad public interest, without any violations, then the two statements of the accounting's value proposition, presented above, will have equal implications. That is, they will be an articulation of one and the same accounting profession's social contract and we will be free to choose among them the foundation of our future educational model. However, if following these two statements could produce conflicts, then we should make an important choice with key implications for the future of the accounting educational model. We should choose among different strategies for developing students' ethical reasoning – their capacity to act in ethical dilemmas.

The professional responsibility to add organizational value means that accountants – in the rich variety of positions of trust they hold within organizations – have primarily to work to further the interest of the principal or the capital owners. Being auditors or business consultants, or assisting management in strategy development, implementation and evaluation, or performing a "finance leadership" (International Federation of Accountants (IFAC), 2013, p. 22) in various organizational settings, accountants' role is to perform fiduciary duties on behalf of the shareholders in order to increase

their wealth. The principle underlying the accounting profession's social contract could be reduced to the following: the higher the profit, the better all professional responsibilities are performed.

One may suggest that creating value for the organizations would result on an aggregate level to a higher economic basis and to better living standard of the society, however, an important consideration to be borne in mind is that no one organization operates in isolation. The activities of the organization have many conscious and unconscious effects for various parties different from the shareholders. And sometimes shareholders' and stakeholders' interests are in conflict:

There are times when the interests – especially the short run interests – of the shareholders are opposite to the interests, and sometimes the rights, of other stakeholders... So the professionals who run the firm necessarily act as the 'ethical' agents of the shareholder in conflicts with stakeholders... And sometimes the ethical high road is not going to be the profit-maximizing decision for the shareholder. (Buchanan, 2003).

The real-world practice provides two very rich pools of examples where profit-maximization decisions and stakeholders' interests are in conflict with one another. The first one involves decisions concerning the general field of strategy development and implementation which damage some stakeholders' interests. These include, but are not limited to, marketing unsafe products that harm consumers, discriminating workers, keeping unhealthy working conditions against workers' fundamental rights, using child labor, conducting misleading advertising campaigns causing significant harm to customers, polluting the environment and thus violating the rights of local communities, etc.

The second pool of problematic profit-maximization decisions involves examples entirely from the field of the accounting profession. They all could be accommodated within the five creative accounting strategies, summarized by Jones (2011): (1) *increasing income* through recognizing sales revenue prematurely, recognizing fictitious sales, recording higher interest receivables, including non-operating profits, etc.; (2) *decreasing expenses* through capitalizing expenses, extending the estimated useful lives of the assets, etc.; (3) *increasing assets* through revaluations, enhancement of intangible assets, etc.; (4) *decreasing liabilities* mainly through off-balance sheet financing and reclassification of debt financing as equity financing and (5) *increasing cash flows*. Some of these aggressive and/or fraudulent financial reporting practices are at the very core of the accounting scandals from the beginning of the century. For example, for Enron it was the off-balance sheet financing, for WorldCom – the capitalization of costs against the requirements of the applicable financial reporting standards, for Parmalat – the fictitious sales, among others. Many other evidences of creative accounting techniques could be provided² but the general implication is that these accounting scandals and corporate failures have considerable consequences for the economy and the greater society. Between 2000 and 2002, for example, \$4 trillion of equity market capitalization in the US were lost, \$340 billion of which belonged to only six corporations – Enron, Global Crossing, WorldCom, Tyco, Qwest, and Adelphia (Messing and Sugarman, 2006, p. 14). However, the aftermaths do not include only financial figures. Beyond the numbers is the lost confidence in the accounting profession and in the financial markets.

² For a chronology of the accounting scandals across the globe, see Jones (2011, Appendix 1).

Most importantly, beyond the numbers are employees that did not get paid and lost their jobs, employees that lost most of their retirement savings; owners and managers that committed suicide, families of managers that were convicted of fraud and received jail sentences, among others.

Potential conflicts between the shareholders' and stakeholders' interests suggest that creating organizational value is conceptually different from the accounting's role to advance global prosperity. Furthermore, taken in extremis, the value proposition understood only as a creation of organizational value, as suggested by Lawson et al. (2014; 2015), undermines the real and broader accounting profession's social contract, as defined by the Pathways Commission (2012). The basic argument is simple. Creating or adding organizational value implies a coordinated "strategy formulation and analysis, planning, and execution" with the intent supernormal profits to be produced. However, the proposition of the efficient market hypothesis (Fama, 1970) clearly states that the opportunities for any abnormal or supernormal profits are eliminated. Market participants receive just profits adjusted for their risk preference. What creates opportunities for supernormal profits are the market imperfections. These could involve, for example, various forms of non-competitive market structures, principal-agent problems, exploitation of public goods and probably most importantly exploitation of information asymmetries between contractors, among others. From this standpoint, Buchanan (2003) rightly observes the role of each business professional:

It is then the job of the business professional, as fiduciary agent of the shareholder, to seek out and – if possible, create – market imperfections ... that produce supernormal profits for

the firm... To a certain degree, market imperfections represent a kind of best practice: no executive tries to make the market more efficient and less profitable.

This means, if committed to a value proposition concerned entirely with adding organizational value, accounting professionals will share the same role as any other business professional – to create and support market imperfections. As there is no other market failure as closely related to the accounting practice as the information asymmetry, the role of the accountants will be to exploit the information asymmetry at the expense of the stakeholders, i.e. at the expense of the greater society. This ultimately undermines the social contract of the profession based on the overriding responsibilities for providing readily available and reliable accounting information for the benefit of the humanity.

Therefore, without a broad perspective on the value proposition for the accounting profession and a commitment to the societal demands placed on it, the profession faces the very real risk of losing its foundations and its identity. The same applies, however, to accounting education that forges the future of the profession. Deriving the educational model on a weak value proposition – for example on "how accountants add value to organizations" (Lawson et al. 2014, p. 298) without even any implication of *sustainability* in the process of value creation – would produce, at best, mediocre professionals. These professionals will find themselves in the middle – just as far away from working only for their own livelihood as from the commitment to the true values of the profession.

The risk of creating mediocre professional, if public interest is not explicitly emphasized, is well understood in the field of professional accounting education. That is why, the International

Accounting Education Standards Board (IAESB) has developed a special standard – International Education Standards (IES) 4: "Initial Professional Development: Professional Values, Ethics, and Attitudes" (IAESB, 2015) that addresses all professional organizations – members of IFAC. This standard aims to establish the professional values, ethics, and attitudes that future professional accountants need in order to act in the public interest (IAESB, 2015, IES 4, §8–9). The commitments to the standard aimed at protecting the public interest are multifaceted. They include, for example: an awareness and concern for the impact on the broader society; sensitivity to social responsibilities; a predisposition to quality, reliability, and responsibility; respect for the legal framework, etc. (IAESB, 2015, IES 4, §A15).

However, extrapolating the broad societal accounting's value proposition into the real practice is in danger of facing two major obstacles. First, this is the belief that the professional responsibilities implied by this value proposition apply only to the profession in general. Of course, no one expects each member of the profession to assume responsibility for the larger society. However, each individual member is obligated to uphold this value proposition through his/her conscious and continuous commitments to the profession's values.

Second, this is the understanding, that the accounting's value proposition is a high ideal that has been in crisis for the last two decades. However, the accounting profession is not the only one experiencing value crisis. A number of studies (Kronman, 1993; Heineman, 2007, among others) point out that the ideal of the legal profession has also been in crisis over the last 30 years. Though advanced societal ideals are hard to be achieved in every profession, this is not a reason to abandon them. It is just a reason for a reform to turn these ideals into

an educational priority, because they are worth striving for. This educational reform should make profession's ideals more easily achievable primarily by making them more explicitly recognized and more consciously cultivated in the educational settings.

3. Educational Implications of the Broad Accounting's Value Proposition

The sometimes necessarily competing demands from the shareholders and the wider society give rise to potential ethical dilemmas in which future accounting professionals are likely to find themselves. In times and places in which some of the business malpractices (e.g., externalizing harmful health and environment effects in areas with very few labor and/or environmental laws) or accounting malpractices (e.g., showing artificial net worth figures violating some of the basic accounting concepts, such as, for example "substance over form") fall beyond the existing binding legal framework it is up to those professionals, involved in decision making processes, to use their discretion in setting the direction for action. That is, they have to decide for the others. Solving these ethical dilemmas and choosing among the competing interests require ethics, which, as Kane (1994, p. 10) suggests, "is directed in the first instance not at bad people, but at good people whose convictions are being drained by intellectual and moral confusions".

Ethics courses are the key instrument of the professional education to generate an impact upon the conscious commitments of the students to the advanced values and purposes of the profession. Ethics has been part of accounting education for more than four decades, but it has failed to produce the desired results. The proliferating corporate scandals from the beginning of the century are the best

evidence of this. Therefore, there should be something fundamentally wrong with the ethics element in accounting education.

On the one hand, the problem lies in the nature of these courses. According to Jennings (2004, p. 13), instead of being focused "on moral absolutes or 'bright line' virtue ethics such as honesty [and] fairness", ethics courses are centered around "social responsibility ...environmental issues, health and safety issues, sweatshops, diversity, and corporate philanthropy". All these issues of business ethics or accounting ethics may well be worthy. However, the only problem is that they are not equivalent to real ethics, which, as research suggests (Taylor, 1985; Waddock, 2005; McGurn, 2015), deals with issues of personal integrity, character and intelligence. These are the same issues with which the true value proposition for the accounting profession begins (Pathways Commission, 2012, p. 23). In a very real sense, until moral absolutes, which appear only on a personal level, are not addressed in educational settings, we are in danger of creating what Waddock (2005) calls "hollow" accounting professionals.

On the other hand, the problem with education in ethics is in the teaching strategies applied. To understand and reflect on the situations of ethical dilemmas any teaching strategies that present ethical dilemmas only as a part of some codes of business conduct or ethical guidance for accounting practitioners that are remote from any personal meaning would not go far. In fact, a number of studies suggest that this kind of leaning contributes to the moral decline of the future professionals (McPhail, 1999; 2001; Dellaportas, 2006; Dellaportas and Hassall, 2013).

Solving the problems with the ethics element in accounting education requires at least two essential improvements:

3.1. A shift from a focus on fragmented ethics to an emphasis on real ethical formation

Real ethics, being focused on building identity and character, could develop higher moral reasoning that would help students take a stance on the kind of people they want to be and thus avoid moral confusions within the wider social frame. This would shape one's moral rigor even in situations when the framework of any reduced business ethics justifies some creative accounting techniques or deceptions in the name of organizational value creation.

An excellent example of the importance of real ethics in solving a huge ethical dilemma in engineering is given by McGurn (2015). He describes a situation from the late 1970s, when the engineer of the Citicorp's new skyscraper built in Manhattan, recalculated his work – a year after the building was opened – and realized that he had made an error. There was a chance the building to be knocked down by strong winds, which statistically came every 16 years. After further investigations and consultations with colleagues, the engineer decided to inform the chairman of Citicorp undertaking the risk to lose his career and to face lawsuits. Instead of being criticized by the chairman, the engineer was praised and asked for advice about what was needed to be done.

They came up with a plan to quietly strengthen the building over a few months, floor by floor. And they did it, too, at a cost of millions.

They had many other choices... Instead, they did what needed to be done... and they spent what it took. In the end they were rewarded for doing the right thing when people learned what had happened. But there was no guarantee it would come out this way. I'd say the difference was simple: these were men of character. (McGurn, 2015, pp. 387–388)

What this example implies is that to become real professionals, students need first to be conscious of the profession's social contract and the resulting value proposition. Accounting profession's value proposition, as defined by the Pathways Commission (2012) and the Code of Ethics for Professional Accountants (IESBA, 2016), makes it clear that when there is a conflict between an accountant's obligation to the organization and the obligation to the society, the interest of the society always comes first. However, acknowledging the responsibility implied by that consciousness is only the beginning. To fulfill the commitments implicit in this profession's social contract, to share the faith that their "work serves a higher good, a higher calling, something greater than [themselves]" (Bennett, 2001, p. 88), students need a center of strength within themselves. Incorporation of moral absolutes into accounting education and conscious reflection upon them as an integral part of the student's learning experience offer the best hope for generating an impact upon the character of the future accounting professionals. These measures are what make the fulfillment of the promise of the accounting's value proposition and of accounting education possible.

However, refocusing accounting education has another important advantage – it contributes to the development of integrated professional competencies. The thesis that to develop knowledge, skills, and abilities as integrated competencies is better than to develop them as discrete and independent ones seems to be an irrefutable statement. The problem is in the flawed approaches proposed. Lawson et al. (2015), for example, identify four levels of competency integration: within a single accounting competency; among multiple accounting competencies; among accounting competencies and management competencies; and integration of foundational

competencies within accounting curricula. Such a technical approach might be useful in some aspects, but it misses the point. True integration of knowledge and competencies is not found in the curriculum itself, but in the students' consciousness. Shulman (2011, p. x) correctly points out that these competencies "are not integrated in the way someone puts the pieces of a complex jigsaw puzzle together; they are integrated via the formation of a sense of identity and personal meaning". Without addressing and involving issues of human values and purpose, all attempts for competency integration would remain perfunctory and fragmentary.

3.2. A shift from pedagogies that transmit prescribed packages of remote ethical rules to teaching strategies that create personal meaning from the ethical dilemmas

It is well known that the pedagogies both enable (Thomson and Bebbington, 2004) and constrain (Wyer, 1984) the valuable learning experience. Traditional pedagogies in accounting education are flawed, because they are rule-based, memorization-dependent, creativity-averse and without out-of-classroom experiences (Albrecht and Sack, 2000, pp. 43–58). In teaching real ethics one should not transmit knowledge, but engage students with self-reflective questions of personal meaning, value, and commitment: "what difference does a particular understanding or approach make to who I am, how I engage the world, and what it is reasonable for me to imagine and hope?" (Colby, Ehrlich, Sullivan, and Dolle, 2011, p. 65). Some of the key pedagogic approaches that encourage students' intentional and reflective engagement in the learning process and could contribute to forming their ethical reasoning capacity are discussed below individually.

The most ambitious as well as the most useful approach is the introduction of *new fully integrated professional ethics courses* that successfully combine the liberal and the vocational elements in education. A lot of such integrated courses dealing with the more general business ethics are described in Colby et al. (2011) and in Pehlivanova and Martinoff (2015, p. 5). They include, but are not limited to: complementary readings from different fields (economics, history, ethics, psychology, literature, etc.); discussion and writing on various issues concerning the philosophy of work, ethical domains of leadership, personal values – e.g. how to live a 'good' life, how to run a 'good' organization, how to manage people, who also want to live a 'good' life (Epley, 2015), among others.

Besides these integrated courses, there are also other *pedagogic pathways to liberalizing accounting education*, which although less comprehensive, are very useful. One such strategy, for "a more diverse, sensitive, and ethical accounting pedagogy" is available in Amernic and Craig (2014, p. 257). The authors suggest ethical problems to be perceived and discussed through 11 different "angles of visions" (patterns, time, emic, positionality, ideology, themes, metaphor, irony, silence, framing, and culture). Other strategies to explore the liberal arts tradition in the context of accounting education are the nonstandard application of literature (Chabrak and Craig, 2013; Boyce and Greer, 2013, among others), the wider usage of history (Chabrak and Craig, 2013), etc.

Freire's (2005 [1968]) *problem-posing or dialogic education* could also contribute to developing ethical reasoning capacity. Unlike the conventional pedagogies where students patiently receive and memorize knowledge about a motionless and predictable reality,

the problem-posing education assumes a reality in progress and suggests that students should undertake transformative actions. (Freire, 2005 [1968], p. 83). A successful example of an accounting course that incorporates elements of Freire's dialogic education is described in Coulson and Thomson (2006). The main learning device in this course is a group collaborative project to produce a shadow account on a large company.³ Following Coulson and Thomson (2006), the lessons learned from this course could be summarized as follows: learning process should be explicitly structured and actively managed, while the content should not be fully prescribed; the teacher has to problematize the situation under consideration and to encourage students' active participation in the learning experience; the pedagogy should include a strong action element; assessment methods should correspond to the values of problem-posing education, but not only follow the legal restrictions and the institutional requirements.

Situated learning as a specific form of the experiential learning could also be conceived as being supportive of students' ethical formation. Learning here is foremost a process of social collaboration that enables collective problem-solving, collaborative confronting and discussing various misconceptions, as well as providing work skills needed for collaborative work (Brown, Collins, and Duguid, 1989). In a more recent research Dellaportas and Hassall (2013) describe a learning exercise that rests on visits to prison by students enrolled in an accounting degree program at an Australian university. Visiting the prison and meeting the inmates (who were former professional accountants) create authentic intellectual and emotional experience for all students that increase

³ Shadow accounts refer to social and environmental reports that are drawn up from information in the public domain (Gray, 1997).

their ethical sensitivity and their courage in ethical decision making when confronting moral dilemmas.

Another suggestion to foster ethical elements in accounting education is the so-called "*hidden curriculum*" (Jackson, 1990 [1968], p. 33). It includes the informal, and sometimes unintended, phenomena in the education that, alongside the official "explicit" curriculum, co-constitute students' thoughts, actions and feelings in a variety of ways. Some examples that strengthen students' learning experience include: development of professional accounting clubs; organization of business competitions in conjunction with professional organizations that go beyond the instrumental approach (e.g. the Institute of Chartered Accountants of England and Wales (ICAEW) competition, Business, Accounting and Skills Education (BASE) – see: <http://careers.icaew.com/events/BASE>), support of a strong campus culture of mutual and social responsibility, among others.

Other pedagogic approaches could also be provided, but the general implication is that only when education aligns knowledge with students' values can it generate a sense of how the professional choice and the commitment to the profession's values create a meaning in life, i.e. a sense of personal fulfillment. This sense will remain with students on their whole career path – long after they have left the academy.

4. Discussion

This section discusses the incremental contribution of the shifts proposed in this paper with respect to the existing calls for reforming accounting higher education in Bulgaria. It also explores the implications these shifts have for the "paper-based versus computer-based assessment" debate.

4.1. Comparison with previous calls for reforming accounting education in Bulgaria

The understanding that the accounting profession's commitments are to the welfare of the society at large and that they begin with the moral capacities of the profession's members has always had and still has many proponents in Bulgaria. The first chairman of the Bulgarian Institute of Chartered Certified Accountants, established in 1931 – Dimitar Dobrev, pointed out:

The professional interest, the personal benefit should not prevail; otherwise we will be denied as a public institution...

I pray you for greater idealism... And finally, ..., I pray you change once and for all our attitude of mind... us, the chartered accountants, human weaknesses are at least allowed. (Institute of Certified Public Accountants (ICPA), 2016, p. 43)

Similarly, commenting on the newly recognized audit profession in Bulgaria, Dobrev (1933, p. 34, p. 36) underlined:

It is wrong to think that only the possession of accounting and technical knowledge could be a sufficient quality in order any person, who has these qualities, to be called to exercise any control [audit] function...

The high professional ethics and the morality – these are the first and most important attributes, the most valuable virtues of the expert-controller [auditor] that will enable him/her to fulfil this high social mission.

In a more recent study, Dinev (2009, p. 20) also observes that

Only truly high moral criteria can solve the conflict between the interests of those who pay for the audit services [the shareholders] and those who benefit from the auditors' reports for "free" [the stakeholders].

He insists that "strengthening the moral responsibility of the auditors as a basic principle" is the key to regaining the lost prestige and trust of the accounting profession and that all "norms, rules, and criteria" should be derived from the broad public interest (Dinev, 2009, pp. 21–22). In a similar vein, Oreshkova (2013, p. 58) also calls for a financial reporting system underpinned by social and "green" ethics based on an adequate system of values. However, while previous researchers have assumed the broad societal perspective as taken-for-granted, this paper shows that alternative accounting's value propositions exist. Furthermore, it is the first to explore the need of having a perspective that considers the common benefit to society at large, but not the private interest of the organizations.

The proposed reforms in accounting education are also consistent with previous ideas and calls for a more balanced commitment to both students' personal and professional development. During 1930s there was a general belief that "only life is able to shape the personal qualities and the moral character of the financial controller [the auditor]" (Dobrev, 1933, p. 37). After the fall of Communism in 1989 it has been recognized that professional education extends well beyond the narrow vocational tenets. Pergelov (2007, pp. 9–10), for example, calls upon accounting educators to assume a greater responsibility for the development of students' personal capabilities:

it is time to get rid of ... the stubbed sense of responsibility toward future generations... The achievement of this goal requires our thought to have not only enlightening and promotional character, but to have also phenomenal nature, to be contingent on the aim to prepare professionals of high mentality and proven spirituality.

Commenting on these issues Pergelov formulates three major sets of recommendations. The first set involves the need for a greater emphasis on the rich theory and history of accounting in a more thorough way. According to Pergelov (2002, 2007), both theory and history of accounting will contribute to the increase of students' intellectual potential and theoretical maturity. The second set of recommendations concerns some improvements in pedagogy. Pergelov (2007, pp. 11–12) argues the usage of teaching strategies that enhance student's ability to think and their attitudes toward lifelong learning, among others. The third set of recommendations addresses the professional preparation and the personal qualities of the educators. Pergelov (2002, pp. 197–199) calls for attracting as educators in accounting programs "persons, who have solid knowledge, critical mind, versatile intelligence, vast general knowledge, strong sense of responsibility" and "high moral virtues". All these recommendations fully correspond to the pedagogical approaches proposed in this paper. While previous suggestions for a reform were too general, the shifts proposed above emphasize students' ethical formation and include teaching strategies recognized around the globe. They are, thus, more focused, comprehensive and well justified than the existing recommendations for reforming accounting education in Bulgaria.

4.2. The "paper-based versus computer-based assessment" debate in context

The preceding sections on the accounting profession's value proposition and the proposed shifts in accounting education ensures the proper context for discussing the issue of how to assess the competencies students achieve in the undergraduate accounting education – using a paper-based or computer-based

state exam. What the discussion up to this point suggests is that professionalism in accounting is not the skills to make and summarize journal entries, nor even only the competence to exercise some professional judgement; it is merely an extrapolation of the profession's values to the real-world practice. The commitment to these values is what underpins providing a common benefit to society at large. Thus, if the general aim is to protect the public interest, the assessment should measure the core drivers of the commitments to the profession's ideal and purposes, and this intuition suggests that assessing students' ethical reasoning should be a pivot for any examination.

Which, then, is the proper way to assess students' ethical reasoning? In general, three different hypotheses seem to exist. The first hypothesis could be referred to as *the "irrelevance" hypothesis* – true commitments to the profession's value proposition cannot be captured by any learning outcomes and their assessment, whatever refined technique is used. As Gabor (1972, p. 75) pointed out: "Ethical behavior is not problem-solving; it cannot be tested by any battery of questions. Greeks knew that it is no use asking a liar whether he is a liar". In this view, the belief that ethics could be formally assessed (at least to some degree) does not make ethical behavior a direct result of this formal assessment – neither using paper-based, nor introducing computer-based exams. Thus, paper-based and computer-based exams, multiple-choice questions and scenario-based questions seem equally relevant or, more precisely, equally irrelevant in terms of the profession's value proposition.

The second hypothesis could be termed *the "relevance" hypothesis*. According to it more complex case-based scenarios requiring students to exercise ethical

judgement seem to better foster their ethical behavior than having a straightforward standardized test requiring students just to fill in the blanks.

It is ... problematic that most exams, which test ethical reasoning cannot possibly foster or test for soft skills and ethical behavior. Overreliance on solving dilemmas relies on memorization of key principles and thinking in isolation. In addition, research in psychology has agreed that solving ethical dilemmas in isolation does not necessarily translate into ethical behavior. (Pehlivanova and Martinoff, 2015, p. 8)

Problems occur when the computer-based exam platform allows only for multiple-choice questions. When this is the case, it might seem that in testing ethical reasoning computer-based exams containing only multiple-choice questions fall behind paper-based exams allowing for scenario-based questions. Then, to avoid any imperfections arising from using only one type of exam questions, the computer-based exams should be, on the one hand, in compliance with the mandatory institutional requirements (see Trifonova, Petrova, and Savova (2010, pp. 125–126) for details) and, on the other hand, underpinned by the same principles of assessment as is the paper-based exam. Five such principles are set in IES 6: "Initial Professional Development – Assessment of Professional Competence" (IAESB, 2015, IES 6, §9, §A9–A20): reliability (consistently producing the same results under the same set of circumstances), validity (measuring what is intended to be measured), equity (being fair and without bias), transparency (publicly disclosing the exam), and sufficiency (being balanced in terms of depth and breadth). When designing an exam, different measures are possible

to achieve these principles more fully.⁴ If not enough, however, it should be borne in mind, that having only multiple-choice questions is not a permanent problem at any educational institution. It could easily be solved with the further development of the computer-based exam platform, that to allow students to create spreadsheets and tables, to undertake computations and calculations, to write reports, etc.

The last hypothesis is *the "sufficiency" hypothesis* – to a sufficient degree, students' ethical reasoning could be tested even using only multiple-choice questions. In general, much of the fundamental knowledge of the professional accounting qualifications is provided within the undergraduate university education.⁵ The existing practices of the leading professional organizations – the Institute of Chartered Accountants in England and Wales and the Association of Chartered Certified Accountants (ICAEW, 2016; ACCA, 2016) – are to test this fundamental knowledge (which inevitably involves ethics) using computer-based exams. These exams rely primarily on multiple-choice questions and allow candidates to pass them only by answering the multiple-choice questions and ignoring the others (if any, depending on the exam). That is, in undergraduate education, even multiple-choice questions seem to be enough for testing students' ethical reasoning mode corresponding to this education degree.

In summary, what these three hypotheses imply is that if testing students' ethical reasoning capacity by the end of their undergraduate education is at all possible,

computer-based examination is as relevant as the paper-based exam. This holds true even when computer-based exams are imprisoned within the limitations of the multiple-choice questions. Furthermore, as the big data approach suggests, any computer-based exam could create a better analytical environment to study individual student's behavior and thus to improve the assessment process (Kabakchieva and Stefanova, 2015).

5. Conclusion

What creates mediocre professionals is not the way of assessing technical competencies achieved by the end of an education degree; it is the weak profession's value proposition on which the entire educational model for the profession may be based. Having a deficient value proposition for the accounting profession (i.e., one, in which the interests of the individual organizations overrides the broader public interest) will increase over time its distance from the intrinsic values of any other learned profession. Thus, the accounting profession faces the very real risk of failing to implement its social contract and of losing its identity. The costs will be substantial and too far reaching – for the profession and all its members, as well as for the society.

An educational reform is needed in accounting in order to make the advanced profession's ideal explicitly recognized and more consciously cultivated in the educational settings. On the one hand, it requires a shift in the focus of the professional ethics courses. They should not favor any fragmented rules

⁴ For example, avoiding ambiguous wording and having internal and/or external preliminary reviews of the exam questions may increase the reliability. Or, making information related to the exam (e.g., scope, type, structure, timing, scoring, etc.) publicly available may increase transparency. Or, ensuring a coverage of all key areas of the accounting curriculum (e.g., financial accounting, managerial accounting, public sector accounting, etc.) and achieving a balance among them, together with an appropriate level of detail (testing not only the content knowledge, but also some higher-order cognitive skills) may increase the sufficiency.

⁵ For example, up to now, the undergraduate programs taught in the Finance and Accountancy Faculty at UNWE have achieved credits for prior learning for all six certificate level papers of the ICAEW ACA qualification (Pozharevska et al., 2016, pp. 195–208). These programs have been also awarded exemptions from three to four papers at the Fundamentals level of the ACCA qualification.

guiding ethical behavior, but emphasize real ethical formation, i.e. building students' identity and character. On the other hand, this reform requires a shift in the teaching strategies. The aim should not be to transmit prescribed packages of remote ethical rules, but to create personal meaning from the ethical dilemmas. These shifts are what offer the best hope for generating an impact upon students' ethical reasoning capacity – the underpinnings of the commitments of the future accounting professionals to the profession's values and purposes. And if the aim of the accounting profession is to protect the public interest, then this capacity should be pivotal to the assessment in any education for the profession.

Different hypotheses exist on the proper ways to assess students' ethical reasoning capacity. The general implication, however, is crystal clear: what cannot be tested in computer-based exams cannot be tested on paper-based exams as well. The converse is also true. If it is at all possible to assess students' ethical reasoning capacity, then computer-based examination is as relevant as the paper-based exam. Within the undergraduate accounting education this seems to hold true even when computer-based exam platform allows only for multiple-choice questions.

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