Evaluating presentation and disclosure practices within IAS 7 and SFAS 95 Statements of cash flows: implications for teaching and assessing student competence

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Abstract
Graduate competency is a key concern of regulators, accrediting agencies, professional organizations, employers and universities. The preparation of the statement of cash flows under different reporting regimes, interpretation and extracting information for use in performance evaluation, financing and investment decisions is an area where accounting competency can be assessed. Using Bloom's taxonomy as a framework for competency level and contextualizing it with the standards of professional organization, the authors develop a contextual original case to qualitatively analyze the responses of students. The preliminary results indicate several conclusions, suggesting the need for further exploration of data, and analysis of the implications for teaching methods and curriculum design.

1. Introduction

One of the primary goals of the postgraduate graduate accounting program at the Metropolitan State University of Denver is ensuring *accounting competency*. The program's assurance of learning defines a*ccounting competency* as the ability of the graduate to "compare and contrast financial and nonfinancial information prepared under alternative external frameworks/standards/bases/principles/ methods; including potential changes in external reporting requirements; formulate strategy using quantitative and qualitative information." The AACSB's Standard 8 (Assurance of Learning, Whitepaper 2013, as amended in March 2019) requires "processes for demonstrating that students achieve learning expectations for the programs in which they participate." The AICPA in turn lists risk assessment, analysis and management, measurement analysis and interpretation, reporting, research, systems and process management, and use of technology and tools for assessing *accounting competency*.

One topic that appears to have considerable value in the assessment of accounting competency, at both course level and program level, is *the statement of cash flows* (SOCF). The SOCF is an essential component of a set of general purpose financial statements, under both International Financial Reporting Standards (IFRS) and United States (U.S.) Generally Accepted Reporting Principles (GAAP), and when used in conjunction with the other financial statements, it provides users with information that enables them to:

- evaluate changes in an entity's net assets (i.e. changes in total assets less liabilities)
- evaluate an entity's financial structure, liquidity and solvency (i.e. the balance between the assets and liabilities of the business, the nature of its assets and borrowings, and ability of the business to pay its debts when they fall due)

- evaluate an entity's ability to alter the amount and timing of cash flows in order to adapt to changes in the business environment and exploit business opportunities
- model and predict an entity's future cash flows.

Under both IAS 7, *Statement of Cash Flows* (IASB, 2017), and SFAS No. 95 *Statement of Cash Flows* (FASB, 1987), all entities that comply with IFRS and U.S. GAAP must prepare a SOCF prepared under either the indirect or direct method. The SOCF should provide information about the historical changes in cash and cash equivalents of an entity by classifying cash flows during the period into operating, investing and financing activities.

Despite the long standing requirements for many global entities to prepare a SOCF, it is often one of the most poorly understood and practiced topics in the corporate reporting and finance curricula. Students often struggle to prepare the cash flow statement appropriately, misclassify certain cash flows, and lack an in-depth understanding of the role this statement plays within a complete set of general purpose financial statements. What is even trickier is the appropriate selection of relevant inputs from the statement for use in equity valuation, performance measurement, capital structure and dividend decisions.

Traditionally within the U.S., the statement of cash flows is taught in a "mechanical" and "textbook driven" manner. The problem sets found in textbooks focus on the preparation of the statement, with relatively little time devoted to discussing alternate classification and presentation options for certain key cash flows, such as interest paid and received, dividends paid and received, and income tax. The relatively limited class time devoted to this topic, and the often counter-intuitive rigid uniformity cash-flow classification requirements of U.S. GAAP, do not help students, but even focusing on the comparative differences between SOCFs prepared under IAS 7 and *S*FAS 95, as some intermediate accounting professors attempt, still provides mixed learning outcomes. These outcomes do not indicate the integration of financial reporting and finance knowledge (connection of ideas). Whether the classification of certain cash flow statement items (such as interest, dividends and taxes as operating or investing or financing) has economic consequences, and whether these items should appear as line items or merely disclosed in notes, complicate the teaching of the cash flow statement. Furthermore, prior research has not examined whether one instructional method is "better" for the teaching of the differences between the reporting and disclosure requirements of IAS 7 and SFAS 95.

While the sequencing of topics and finding enough space in the semester for the teaching of the cash flow statement in intermediate accounting courses has been examined in prior research (McNellis 2015; Dugan, Gup and Samson 1991), accounting educators still debate whether conceptual learning or experiential learning is effective. IFRS research advances "concept",

"principles", "framework" based teaching (Hodgdon, Hughes and Street 2011; Carmona and Trombetta 2010; Wells 2011). For teaching the "judgment" required in the applications of IFRS, Hodgdon et al (2011) propose a four step process. They are introduction of core concepts, followed by the teaching of principles, then rule (s), and finally the required judgement. For Carmona and Trombetta (2010) introducing the "economic essence" of a transaction and then teaching the theoretical structure and solution to an accounting problem established by each regulator or standard setter is a "concepts based" teaching (page 4).

Case studies are used to demonstrate the application of theoretical concepts to complex real world situations. Proponents of case studies argue that they are teaching instruments for a deeper understanding of the subject matter under discussion (Stewart and Dougherty 2006; Escartín, Saldaña Martín-Peña, Varela-Rey, Jiménez, Vidal and Rodríguez-Carballeira 2015; Penn, Currie, Hoad and O'Brien 2016). From this premise many higher order disciplines, including accounting and finance textbook authors (Anthony and Govindarajan 2014; Bruner, Eades and Schill, 2017; Healy and Palepu 2013) provide carefully tailored cases that enrich the teaching and learning process. The Eberly case Center at Carnegie Mello University citing Christensen, 1981 and Paul Lawrence states that a good case study is "the vehicle by which a chunk of reality is brought into the classroom to be worked over by the class and the instructor. A good case keeps the class discussion grounded upon some of the stubborn facts that must be faced in real life situations." The bulk of the literature on the teaching of the statement of cash flows however focus on the mechanics, ensuring the computational skills by requiring the learner to perform several stylized exercises and problems (Rodgers, Simon and Gabrielsson, 2017). In other words, though accounting textbooks contain lots and lots of challenging problems, they predominantly have a preparer's perspective. Complex realities that emerge from classification and shifting classification of cash flows and their implications for valuation, performance evaluation, capital structure and dividend decisions are not the focus of most textbooks (Subramanyam 2014; Penman 2013; Foster 1986; Easton, McAnally, Sommers and Zhang 2018; Damodaran 2014).

International accounting textbooks that are targeted at U.S students explain cross country differences in financial reporting using analytical frameworks grounded in legal systems, taxation, financing choices available for firms, inflation, political and economic ties between countries, level of economic development, educational level, culture and IFRS adoption (Doupnik and Perera 2014:28; Choi and Meek 2013, 31-34; Wallace, Mohammed , Choudhury and Pendlebury 1997). The attempt by textbook authors to "integrate" IFRS into existing U.S. curricula by adjusting for "key" differences (Spiceland, Sepe, and Nelson 2011; Choi and Meek 2013, Doupnik and Perera 2014; Fay, Brozovsky, Lobingler 2011) do not adequately demonstrate the consequences of the differences in the cash flow statement standards. Opportunistic classification, classification shifting and rigidities are causes of potential distortion of the statement of cash flows. Presentation as line item, netting of inflows & outflows (example

interest received less interest paid), and disclosure in notes are potential sources of distortion. One dimension of evaluating *accounting competency* is the ability to detect distortions.

Cash flow from operation has increasingly become part of the performance metrics for managers. Lee, Glasscock and Park (2017) for example reported that firm's stock returns are strongly associated with cash flow from operation when the companies are in financial distress. Similarly, Gordon, Henry, Jorgensen and Linthium (2017) examined the reporting of interest paid, interest received and dividends received under IAS 7 and documented that the classification choice can be explained by managerial opportunism that aimed at showing increasing operating cash flows (OCF). The termination of the convergence project between the FASB and IASB not only allows older differences to persist but also allows drifts in the recognition, de-recognition, measurement, displaying/ presentation/ classification of corporate information (Negash, Holt and Hathorn 2017; Nobes 2013). While the decade long convergence of the two systems of accounting has been driven by the gains (if any) stemming from financial integration (Daske, Hail, Leuz, and Verdi 2012, Negash 2009), growing public (social) discontent and trade tensions (Stiglitz 2002; Fukuyama 2018; Schwab 2019) is likely to make the two sets of standards to drift apart in the foreseeable future. The drifts add to the problems of distortions.

From the perspective of the International Accounting Standards Board (IASB), there is no consensus on the classification of certain cash flows for some types of entities. IAS 7 presently permits cash flow classification flexibility by allowing an entity to present its cash flows from operating, investing and financing activities in a manner most appropriate to its business. For example, cash flows from interest and dividends received may be classified as operating cash flows because they are part of profit or loss. Alternatively, interest paid and dividends received may be classified as financing cash flows and investing cash flows respectively, because they are costs of obtaining capital or returns on investments. In addition to the classification flexibility offered for certain cash flows under IAS 7, the standard also requires that the cash flows from interest and dividends received and paid, and income taxes paid, shall be disclosed separately as line items within the SOCF.

In contrast to the flexibility of cash flow classification and definitive recognition/disclosure requirements of IAS 7, SFAS No. 95 is different in many ways. SFAS No. 95 requires classification of interest paid as operating and only requires line item disclosure if the direct method is used. Hence, IAS 7 may introduce opportunistic classification while rule based classification under SFAS 95 lends itself to distorted financial statements as it inhibits judgement about the nature of the interest paid. Researchers that examined opportunistic classification of cash flows in IFRS cash flow statements use U.S GAAP as the benchmark (Gordon, Henry, Jorgensen and Linthieum, 2017), and such analysis does not address the distortions that might arise from rigidity observed in SFAS 95 based statements. Hence, examining the economic consequences of the differences

between IFRS and U.S GAAP based cash flow statements enhances the level of learning from experiential (mechanical) to conceptual.

Empirical evidence also highlights that market reaction to line item disclosure (recognition) is not the same as for narratives provided in notes (Hales and Orpurt, 2013). Therefore, a teaching method focused on the mechanics of preparing the cash flow statement is unlikely to demonstrate the consequences of the reporting differences between IFRS and U.S. GAAP. A competency based approach that addresses both preparation and use, under competing reporting systems, would allow the learner to connect ideas taught in corporate reporting and corporate finance courses. The classification of cash flows into operating, investing and financing is "probably derived from the finance theory" (Nurberg, 1993 cited in Wallace et al, 1997). As noted earlier the cash flow from operations is a performance measure that is close to "non-GAAP earnings" (earnings before interest, taxes, depreciation and amortization). Studies on the misuse of non-GAAP/Non IFRS earnings have provided mixed results (Aughton & Burns, 2016; Doyle, Jennings & Soliman, 2013; Malone, Tarca & Wee, 2016). Using Bloom's 1956 taxonomy as theoretical framework and a hypothetical case as an instrument this paper examines the degree of accounting competency gained from the study of the statement of cash flows. The paper qualitatively analyses the responses of students. The preliminary findings suggest several implications for instructional methods and design of the curricula.

The remaining section of the paper is organized as follows. In section II, we present the theoretical framework for learning outcomes while section III reviews the relevant literature on the cash flow statement. Section IV states the research question and outlines the methodology. The case connects the effects of classification and presentation on investment, performance evaluation, capital structure and divided decisions. Section V presents the findings from a pilot study that involved 38 undergraduate and postgraduate accounting courses at the Metropolitan State University of Denver (MSU Denver), an AACSB (business) accredited university that has teaching as its primary focus. Section VI discusses the findings and rounds out the paper.

II. Theoretical framework

Grossman, Smagorinsky and Valencia (1999) examined whether activity theory is a useful theoretical perspective for research that relates to the education of teachers. They document that the reform agenda that advocated for "instruction method that is experiential, learner-centered, activity-oriented, interconnected, and constructivist is not observed in practice, and teaching method has remained content-oriented, teacher-centered, authoritarian, mimetic, and recitative". Notwithstanding these, they also state that teachers "tend to gravitate" to the value system the school in which they are employed. With respect to teaching at tertiary level, universities do not ascribe to one teaching method. For instance, the Federal University of Australia lists the various teaching strategies followed in various universities (active learning, case

studies, collaborative learning, cooperative learning, enquiry-based learning, peer learning, problem and project based learning, etc.).

Wilson & Simons (2010) examined university students' perceptions and reported that 'hard' (academic achievement) and 'soft' (satisfaction, development of key skills) are mediated through their approaches to study, and their perception of heavy workload and inappropriate assessment influenced students' study method and current learning experience. A number of papers and the popular press have documented the inappropriateness of using student perception of instruction (anonymous reviews of students) for instructor/course evaluation, assessing learning outcomes and program effectiveness/feasibility (American Accounting Association 1999; Barton, Andrew and Schewab 1994; Crumbly and Smith 2009; Flinn and Crumbly 2009; Hall et al 2014; Haskell 1998).

Fry, Ketteridge, and Marshall (2003) classified academic knowledge as abstract reflective, concrete reflective, abstract active and concrete active, and related the four classification to the Kolb (1984) Learning Cycle where learning is primarily defined as understanding through the "transformation of experience". The approaches to course or module design are systematic, intellectual, problem based, creative/experimental and training or workshop based. Mesa (2019) applied "sense making" to understand the learning process of accounting students in accounting data analytics project that involved a case, documenting at each stage of the learning process. The process had a task performance learning outcome in the situation of "uncertainty" and "ambiguity".

When these studies are juxtaposed with the well-known Bloom's (1956) taxonomy, active-passive-Socrates learning/teaching strategies and SOLO (structure of the observed learning outcome), competency about a specific topic can be evaluated at both course level and program level. Rodgers, Simon and Gabrielsson, (2017) document that within the accounting education, both conceptual and experiential learning have been important learning approaches, and as to the pedagogy, they outline three approaches "embedded in behaviorist, cognitive and humanistic schools of learning". However, while experiential learning has been extensively studied in accounting education, Rodgers et al 2017 argue, "the critical role of conceptual learning has received considerably less attention." Following Bloom's framework, many traditional PhD programs expect that the thesis "contributes to new knowledge" or "create" something unknown and be published in peer reviewed journals while a graduate level course may aim at achieving the competency to "justify a stand or a decision" and to "draw connection among ideas". Bloom states that this may be evaluated by the ability to appraise, argue, defend, judge, critique, value, select, support, and weigh. Similarly, for undergraduate capstone courses "use of information in new situation" (execute, implement, solve, use, interpret, etc.) and

"explain ideas or concepts" (classify, describe, discuss, locate, recognize, report, etc.), might be useful dimensions for assessing accounting competency.

III. Review of the literature on the teaching of the statement of cash flows

Evaluation of the competency goals depend on several factors, including whether the "right" form of assessment is done at course or program/degree qualification/ level, whether course grades are decoupled from core competency assessment and whether the assessment is internal or external. In most U.S universities the statement of cash flows is taught in Principles of Accounting I, Intermediate Accounting I, Intermediate Accounting II, Auditing, International Accounting, and in a number of graduate level accounting courses. The AICPA distinguishes accounting competency from professional competency and business competency, and defines the former as competency in "risk assessment, analysis and management, measurement analysis and interpretation, reporting, research, systems and process management, and technology and tools". The Pathways Commission (2012) had 7 recommendations and urges universities to "build a learned profession for the future by purposeful integration of accounting research, education and practice; integrate accounting research into accounting courses and programs." The AACSB accounting accreditation (AACSB, Standard #4 2018:23 and the Whitepaper of March 2019 for Standard 8) deal with content and quality, and requires that the AOL (competency outcome) should be documented. In other words, the instructor faces the burden of complying with various standards.

Lawson et al (2014: 304) document that accounting competency involves "external reporting and analysis (including related internal reports)". For them "analysis includes the use of judgment when applying accounting principles, assessment of both earnings quality and the valuation methods used in the statements, risk analysis, financial ratio analysis, forecasts of profitability and future cash flows based on the information reported in external financial statements." For Subramanyam (2014:11) accounting analysis, finan cial analysis and prospective analysis are subsets of business environment and strategy analysis. Hence, learning the effects of recognition (line item presentation); classification (operating, investing and financing); reclassification, and disclosure in notes (narrative description) of cash flows and use of data extracted from the statement, by requiring senior and post graduate accounting students to analyze an original case, is one method of assessing competency, and the integration of knowledge.

From the AICPA's list of accounting competencies, the cash flow statement relates to measurement analysis, interpretation, and reporting. In terms of the Pathways Commission 2012 the topic relates to Standard 4.4 where professional judgement is purport to be "integrative", which itself is presumed to be based on a conceptual model that enables "an evaluation of multiple accounting organizations' models (see also the report from Management Accounting teams:-Issues in Accounting Education Vol. 29, No. 2, pp. 295-317). In other words, the education

should ideally be driven by the integration of competencies, such as the integration of finance, corporate reporting, and strategic decision (Lawson et al 2014:.299; Subramanyam 2014; Palepu and Healy 2013; AICPA). This is consistent with Boom's framework (drawing connections among ideas) and evaluation (justifying a stand or a decision).

As noted earlier the teaching of the SOCF followed the prescriptions of the standards (SFAS 95 and IAS 7) and aimed at ensuring student understanding of the mechanics of preparing the statement under direct and indirect methods, and where necessary how to reconcile the two results. Typical textbook exercises and problems provide successive years' balance sheet data, an income statement, some additional information, and require the student to prepare a cash flow statement. In few cases, there is a reconciliation requirement between direct and indirect methods while in other cases there is discussion of the timing differences between accrual and cash basis accounting (Dugan, Gup and Samson 1991; Subramanyam 2014). In other words, the teaching of the cash flow statement does not integrate the competency outcomes achieved in the preparation with ability to use and interpret information contained in the same statement. Investment, financing, distress and dividend decisions arising from differences in recognition (presentation), measurement, classifying (reclassifying) and disclosure of cash flow information are not adequately addressed.

Subramanyam (2014:7; Easton et al 2018; Penman 2013; Damodaran 2005) state that the cash flow statement must allow for the evaluation and interpretation of sources and uses of cash, the asset replacement and financing (internal or external financing) decisions, financing sources for expansion and mergers, degree of dependency on external financing, and the link between cash flows and dividend policy. Hollie, Nicholls and Zhao (2011) examined the effects of the Security and Exchange Commission (SEC's) one-time opportunity for firms with misclassified cash flow items to correct these errors without issuing an official restatement, and reported that firms overstated net operating cash flows and understated net investing cash flows. Artikis and Papanastasopoulos (2016) examined the cash component of earnings for earnings persistence and stock returns, and documented that cash flows indeed persist.

Furthermore, using 798 companies' data from 13 European Union countries that reported cash flows in accordance with IAS 7, Gordon *et al* (2017) found that classification choice can be an OCF-increasing activity when capital market incentives exist, there is greater likelihood of financial distress, high leverage, and when the company is accessing equity markets more frequently. Baik, Cho, Choi and Lee (2016) examined the interest payments of Korean companies and reported that "financially distressed firms, firms with high interest payments, firms with high bank ownership, and Chaebol (large industrial and family controlled) affiliated firms tend to shift their interest payments from operating to financing cash flows, thereby increasing the total amounts of operating cash flows". Desai and Nagar (2016) using cases from India examined

auditors' failure to curb classification shifting, and reported "auditors are sensitive to classification shifting while assessing fraud risk and audit effort. However, their willingness to report such misclassifications is affected by the overall legal liability regime of the region in which their clients operate".

A significant portion of the financial reporting literature uses the terms disclosure and presentation interchangeably. The FASB's Concepts Statement #8 (as amended 2018, objective 20) states that cash flow information helps users to make host of decisions including the reporting entity's operations, financing and investing activities, as well as its liquidity or solvency. FASB's exposure draft Concepts Statement #8 Chapter 7 (2016) defines the term presentation as the displaying of information as line items, totals, and subtotals on financial statements (PR1). The IASB in turn (Disclosure Initiative—Principles of Disclosure Discussion Paper DP/2017/1; 7.17) states that presentation and disclosure need to balance flexibility with faithful representation, make information comparable among entities, and argues against the use of 'boilerplate' language. Table 1 below provides a summary of the reporting requirements for the presentation of interest paid, interest received, dividends received, dividends paid and income taxes paid under IAS 7 and SFAS No. 95.

In addition to the classification differences, Table 1 identifies the items that must be separately recognized and disclosed as line items within the SOCF, and whether the disclosure is mandatory or optional. Evidence from the capital market literature indicates that the effect of recognition (line item presentation) and disclosure is different. Behavioral studies that focused on earnings and equity valuation indicate that the two forms of information dissemination may lead to different investor judgement and perception, especially in non-professional investor settings (Agnew, 2016; Dong, Wong-On-Wing and Lui, 2016; Shana, Clor-Proell and Maines, 2014; Ahmed, Kilic and Lobo, 2006; Barth, Clinch & Shibano, 2003). While these issues are crucially important to both the accounting preparer and user alike, they are rarely promoted within teaching sessions on the SOCF.

Table 1: Comparison of cash flows presentation under IFRS and U.S. GAAP

	IASB – IFRS IAS 7	FASB – U.S. GAAP SFAS 95	
	Direct and Indirect Methods[1]	**Direct Method[2]**	**Indirect Method[3]**
Interest paid	Operating or Financing [D]	Operating [R]	Operating [D]
Interest received	Operating or Investing [D]	Operating [R]	Operating *
Dividends received	Operating or Investing [D]	Operating [R]	Operating *
Dividends paid	Financing or Operating [D]	Financing	Financing
Income taxes paid	Operating [D] (unless specifically financing or investing)	Operating [R]	Operating [D]

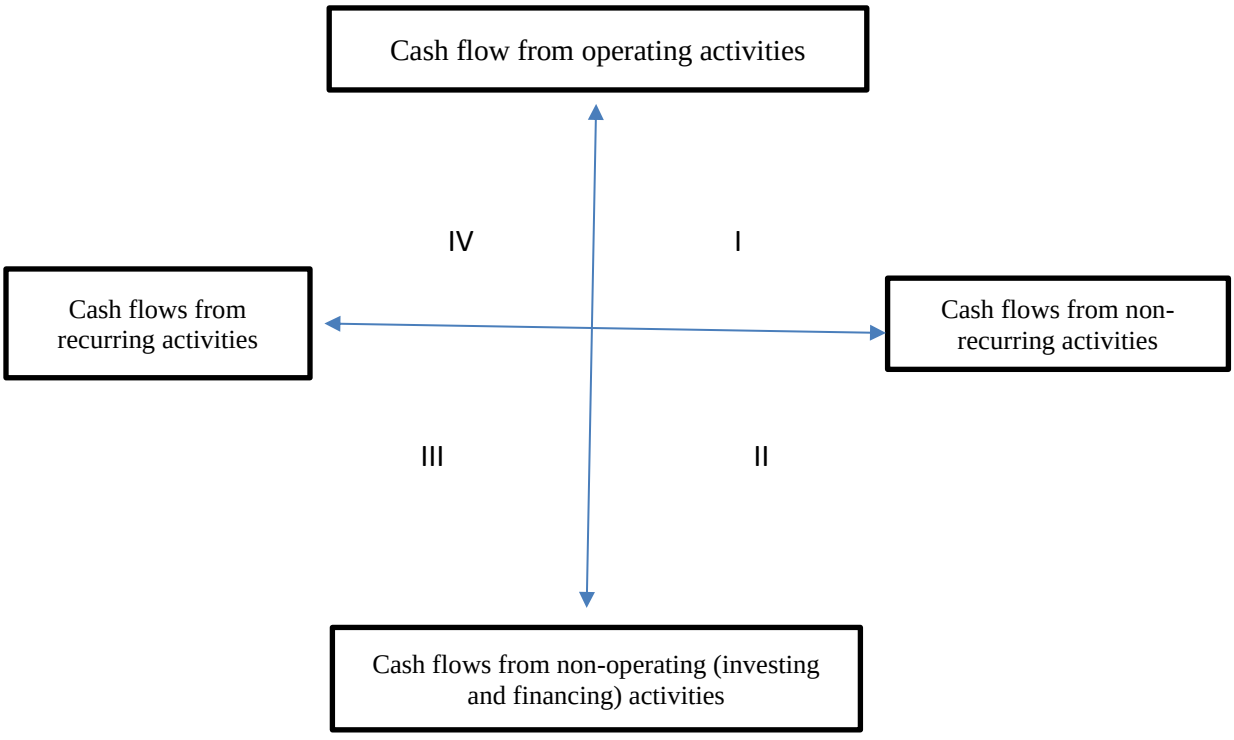
[**R**] Separate reporting mandatory within the SCF
[**D**] Separate disclosure mandatory
[*****] No mandatory separate recognition or disclosure

Definition
Financing: activities and transactions that raise capital for an entity and return cash to creditors and shareholders
Investing: activities that include the acquisition and disposal of property, plant and equipment, other long-term assets and other investments; and
Operating: activities not classified as financing or investing; activities that are involved with the main revenue-generating portion of the business
Sources: Spiceland, Sepe, and Nelson 2011, 200); [1] (IASB IAS 7 par. 31 to 36); [2] (FASB ASC par. 230-10-45-16 to 17); [3] (FASB ASC par. 230-10-50-2); https://www.iasplus.com/en-us/standards/ifrs-usgaap/cashflows); and ACCM 6950 student research projects.

Alderman and Minyard (1991, 112) identify that under SFAS No. 95 operating cash receipts may include cash collected from customers and interest and dividends received. Operating cash payments may include cash paid to employees and other suppliers of goods or services, interest paid, and income taxes paid (112). SFAS 95 requires separate reporting of interest paid, interest received and dividends received if the reporting entity prepares its SOCF under the direct method (see Table 1). Under the indirect method, only interest paid must be disclosed, whereas for interest received, dividends paid and received disclosure is voluntary. However, it should be noted that "separate disclosure" could be either on the face of the SOCF or in an accompanying disclosure note. In contrast, IAS 7 provides flexibility in classification, but requires separate disclosure for these items (in many jurisdictions this means separate recognition on the face of the SOCF). As a result, IAS 7 allows professional judgement to potentially influence cashflow

classification in an opportunistic manner, and driven by performance, debt and dividend obligations (Gordon *et al*, 2017; Penman, 2013: 601).

In summary then, although IAS 7 and SFAS 95 appear similar (converged) in their reporting requirements for the SOCF, there are several conceptual and procedural differences that instructors, students and practitioners overlook. Identification of which cash flow standard is vulnerable to "opportunistic classification" and which one is vulnerable to "rigidity" (misrepresentation of an economic reality) is an important point for student understanding and connecting ideas (integration of knowledge). In other words, detecting OCF increasing and income increasing accounting essentially have the same theoretical basis as the earnings management, the manipulation of other comprehensive income (OCI), and use of non-GAAP/non-IFRS earnings (Healey and Whalen 1999; Leuz et al 2003; Lemma et al 2018; Graham & Lin 2017; Doyle, Jennings and Soliman 2013; Isidro and Marques 2013). Figure 1 below extends Subramanyam's (2014: Exhibit 6.2 P.343) income classification to the cash flow classification problem, and argues that the more the cash flow is from operating activities and it is recurring (non-transitory), the information is useful for cash flow based performance assessment, valuation, financing and dividend decisions (quadrant IV in Figure 1).



IV. Research question, methodology and data:

Juxtaposing the different strands of the literature, the paper assesses accounting competency by observing the responses of students to set of questions that relate to the statement of cash flows. The questions include elementary as well as application questions. The identification of a cash flow statement that is vulnerable to opportunistic classification and/or the one that is leading to distortion of an economic reality is an important conceptual milestone in the learning process. As indicated earlier higher level of competency is interpreted to mean the ability to connect for example preparation ideas with valuation ideas. In other words, experiential learning (preparation of the cash flow statement under each reporting framework) is integrated with contextual use of cash flow information.

In order to explore the issues, the authors developed a hypothetical case that is consistent with Bloom's framework that has respondents acting as accounting advisor to a variety of corporate clients and addressing queries regarding the objectives and presentation practices within the SOCF. The case was divided into six parts, and sought to address a respondent's accounting competence across a range of levels across Bloom's taxonomy. We classified accounting competency into higher and lower (basic) levels. The "evaluate and apply"; "justify a stand or a decision", "ability to connect ideas", which are manifested in appraising, arguing, defending, judging, critiquing, valuing, selecting, supporting, and weighing were selected for higher level accounting competency (graduate level courses). For basic (lower) level accounting competency, apply, understand and remember which are manifested in executing, implementing, classifying, interpreting was used as pointers of undergraduate accounting courses. The case study is reproduced in Appendix A of this paper, and was structured as follows:

I. Part I collected contextual information about the respondents including the type of accounting program they were studying, their level of work experience, what accounting classes that has or were currently enrolled within, and the number of hours of instruction that they had on the SCOF.
II. Part II required respondents to answer six general multiple-choice questions about a SOCF prepared by a merchandising company, including the objective behind its preparation and how certain key cash flows, such as interest, dividends and taxes, should be classified within the statement. These questions asked for the respondents' professional opinion, based upon relevant circumstances that applied for the preparing firm, rather than a GAAP specific general answer.
III. The third section asked respondents to indicate their level of agreement with fourteen separate Likert-scale statements that each explored the links between the presentation and classification of cash flows with the objectives and qualitative characteristics of useful accounting information as articulated within the FASB's Statement of Financial

Accounting Concepts: Statement No. 8 – *Chapter 1, The Objective of General Purpose Financial Reporting, and Chapter 3, Qualitative Characteristics of Useful Financial Information,* and the IASB's 2010 *Conceptual Framework for Financial Reporting*.

IV. Part IV provided SCOF information for a small hypothetical dual-listed public company that sells ready-made garden furniture. The CFO of this company wished to prepare a SOCF that provides useful information for investors, lenders, other creditors, and had the option of preparing its SOCF under two alternate financial reporting frameworks. Respondents were presented with two different SOCFs, Version A and Version B, and were asked a multiple-choice question about which of the alternative presentations produced the most decision useful information, and three further questions that focuses on identifying the amount and classification of interest paid, income taxes paid, and dividends received, within each version of the statement. Versions A and B of the SCOF were prepared in accordance with IAS 7 and SFAS No. 95, respectively, although respondents were not made aware of this information. The aim of this section was to explore whether students could identify whether the presentation and classification of cash flows can potentially influence user perceptions about the amount and significance of finance costs, taxes, and dividends received during a period.

V. Part V assessed the comparative usefulness of the two versions of the SOCF information presented in part IV for different types of decisions, including determining executive compensation, investment decisions, debt financing, and dividend payments. Respondents were asked five multiple-choice questions about which version of the SOCF would be preferred by different stakeholders, and whether either were subject to opportunistic classification and misclassification by preparers. Part V was designed to assess accounting competence at a higher level by integrating financial reporting and corporate finance knowledge together. Questions 19 to 24 were added to the instrument after the pilot survey was taken.

Across its five parts, the case study included 6 contextual, 14 Likert-scale, and 15 multiple-choice questions. Prior to the creation of the case, the authors examined the cash flow reporting patterns of the 500 Top Financial Times Global Companies, between 2009 and 2016, which highlighted substantial international differences in the presentation and classification of cash flows relevant to this current paper.

In designing the case, we took note of ethical standards for studies that involve human subjects. Pilot tests of the case were conducted during the summer and fall semesters of 2019, and this present paper merely reports on the initial results for 38 respondents who fully completed the case during fall 2019. These 38 respondents were taking the undergraduate course ACC 4700 *Internal Auditing*, or the graduate course ACCM 5020 *Accounting Communication and Research*.

The case was administered as a take home assessment, and students had a week to complete the case study.

Plans are in place to collect additional data from students attending the following classes during spring 2020: ACC 4200 (Auditing), ACCM 5020 (Accounting Communication and Research), and ACCM 5510 (Accounting Theory).

V. Analysis and results:

Analysis of Part I - contextual data

The results here provide the authors' initial analysis of the pilot case studies completed by 38 respondents during fall 2019. Further analysis is ongoing, and these initial findings represent a high level qualitative overview of the data collected together with insights about accounting competence and student understanding of the SOCF.

Of the 38 students completing the pilot case study, 47.4% were enrolled on MSU Denver's Master's in Professional Accountancy program, and 50.0% were part of the institution's combined undergraduate and graduate programs (see Table 2). Most of the graduate students were at the start of the program, and had not yet taken graduate courses in financial accounting and reporting (see the discussion of Table 4 below).

Table 2: Academic program enrolled on

Program type	No.	%
Undergraduate	1	2.6%
Graduate	18	47.4%
Combined program	19	50.0%
Total	38	100.0%

Table 3 illustrates the number of hours of instruction that the respondents had previously in the SOCF. Rather surprising was that only 7.9% of students stated that they had no prior classroom experience of the SOCF. Furthermore, a grand total of 31.6% acknowledged that they had only received between 0-3 hours of classroom instruction in the SOCF, while a similar percentage had 7 or more hours of instruction.

Table 3: Hours of SOCF Instruction

Hours of instruction	No.	%
None	3	7.9%
1-3	9	23.7%
4-6	14	36.8%
7-9	9	23.7%
10 or more	3	7.9%
Total	38	100.0%

As Table 4 explains, most of the students completing the case study had completed or were in the process of completing *Principles of Accounting I*, and *Intermediate Accounting I and II*. However, for some of these students, the acknowledged number of SOCF instruction hours appears surprisingly low. Either these students did not remember their SOCF classes, or the incorporation of the SOCF as a topic in these classes was marginal at best, which has implications for their knowledge and understanding of the topic area.

Table 4: Accounting Classes completed or currently taking

Undergraduate	No.	%
Principles I	36	94.7%
Intermediate I	36	94.7%
Intermediate II	35	92.1%
International	2	5.3%
Advanced	3	7.9%
Auditing	9	23.7%
Graduate		
Financial Statement Analysis	0	0.0%
Accounting Theory	3	7.9%
Financial Statement Analysis and Quantitative Methods	0	0.0%
Financial Reporting and Analysis	0	0.0%

In addition, only 7.9% of the respondents had completed or were in the process of completing a graduate financial accounting course with SOCF content, namely *Accounting Theory*.

Table 5 shows that 44.7% of students had no years of accounting-related work experience, and 7.9% had six or more years of experience. This contextual factor should influence the level of accounting competence that a respondent demonstrates, as relevant practical experience should add to classroom experiences about the SOCF.

Table 5: Years of accounting-related work experience

Hours of instruction	No.	%
None	17	44.7%
1-2	12	31.6%
3-5	6	15.8%
6 or more	3	7.9%
Total	38	100.0%

In summary, Tables 2-5 provide some important contextual information about the respondents that may be relevant to their predicted level of SOCF accounting competence according to each of the level described by Bloom's Taxonomy.

Analysis of Part II – general questions about the statement of cash flows

In terms of responses to the six multiple-choice questions about a SOCF prepared by a merchandising company, results were surprising. In terms of understanding the objective for the SOCF, Table 6 shows that only 55.3% correctly identified that the SOCF should present the historical periodic changes in cash and cash equivalents. Rather concerning was the fact that 15.8% of respondents did not consider that cash equivalents were part of what the SOCF reported on.

Table 6: Objective of the SOCF

Objective	No.	%
Forecast changes in cash & CE	11	28.9%
Forecast changes in cash	1	2.6%
Historical changes in cash	5	13.2%
Historical changes in cash & CE	21	55.3%
Total	38	100.0%

Of the students who answered this question incorrectly (17/38), 4 had three or more years of relevant industry experience, and 7 had no relevant experience.

In terms of opinions as to how a merchandising company should classify dividends received within its SOCF, the results presented in Table 7 indicate that the majority of students appreciated a need for an entity to present its cash flows in a manner which is most appropriate to its business, rather than presenting dividends received as an operating inflow as per the requirements of SFAS No. 95. In fact, only 13.2% of the U.S. students completing the case, used the present U.S. GAAP classification for such a cash flow. Furthermore, only 13.2% of respondents used the classification flexibility allowed under IAS 7, which suggests that most students actually considered the relevant circumstances within the question, and considered the best dividend treatment for a merchandiser whose core operating cash flows are generated by selling goods.

Table 7: Classification of dividends received for a merchandising company

Objective	No.	%
No answer	1	2.6%
As an operating activity	5	13.2%
As an investing activity	24	63.2%
As a financing activity	3	7.9%
Either investing or operating	5	13.2%
Total	38	100.0%

Similar results were identified for the next two questions, the appropriate treatment for loan interest on a 25 year bond, and an interest penalty on an unpaid supplier invoice for a merchandiser. In terms of opinions as to how a merchandising company should classify loan

interest on a 25 year bond within its SOCF, 68.4% correctly suggested that this cash flow should be classified as a financing, rather than a core operating cash outflow.

Table 8: Classification of loan interest paid on a 25 year bond for a merchandising company

Objective	No.	%
No answer	1	2.6%
As an operating activity	5	13.2%
As an investing activity	2	5.3%
As a financing activity	26	68.4%
Either financing or operating	4	10.5%
Total	38	100.0%

In correlation to the answers to the previous question, as Table 9 illustrates, the majority of student opinions appeared to be influenced by the relevant circumstances of the case, as 65.8% correctly identified that the interest penalty on an unpaid supplier invoice for a merchandiser should be classified as an operating cash flow.

Table 9: Classification of loan interest penalty on an unpaid supplier invoice - a merchandizer

Objective	No.	%
No answer	1	2.6%
As an operating activity	25	65.8%
As an investing activity	1	2.6%
As a financing activity	6	15.8%
Either financing or operating	5	13.2%
Total	38	100.0%

15.8% of students suggested that this form of interest penalty should be classified as a financing activity, which is problematic as this could distort the information being provided for predicting claims on future cash flows by providers of capital to the entity, due to its one off, non-reoccurring nature.

Table 10 illustrates student opinions about the method a merchandiser should use for preparing its SOCF if useful information is to be provided. While 7.9% incorrectly identified that the accruals method should be used, 36.8% of students suggested that the direct method should be used, which is in line with the method recommended by both the FASB and the IASB. This indicates that students understand the potential limitations of the indirect method, and the extra information that the direct method provides about operating cash flows. 39.5% of students correctly identified that both the indirect and direct methods can provide useful information for users.

Table 10: To provide useful information for users, a merchandising entity should prepare its SOCF in accordance with which method?		
Method	**No.**	**%**
No answer	1	2.6%
The accrual method	3	7.9%
The direct method	14	36.8%
The indirect method	5	13.2%
Either the indirect or direct method	15	39.5%
Total	38	100.0%

While previous questions asked students to evaluate the objectives behind the preparation of the SOCF and the classification of key cash flows for a certain type of entity, Table 11 provides the results for a question that asked about the presentation of the amount of interest paid, and whether this should be separately recognized as a line item or merely disclosed within the notes to the accounts. In contrast to the FASB's presentation requirements for interest paid under the indirect method, 55.3% of students preferred interest to be recognized and articulated as a specific line item with the statement of cash flows. In contrast, 18.4% of students supported disclosure by way of note, and 7.9% would allow a separate unarticulated supplemental disclosure on the same page as the main SOCF. Finally, 15.8% would allow any of the recognition/disclosure just described, which suggests that students do not always appreciate the difficulty users have in locating key information that is disclosed in alternative locations.

Table 11: Presentation of interest paid with a merchandiser's SOCF		
Presentation approach	**No.**	**%**
No answer	1	2.6%
Recognized and articulated as a specific line item	21	55.3%
Included as a disclosure note within the notes to the financial statements	7	18.4%
Presented as a separate disclosure note on the same page as SOCF	3	7.9%
The entity is free to use any of the presentation methods described above	6	15.8%
Total	38	100.0%

Analysis of Part III – How SOCF presentation practices impact the qualitative characteristics of useful financial information.

Table 12 provides the results for students' responses to the fourteen Likert-scale statements about various linkages between SOFC presentation and classification and the qualitative characteristics of useful financial information.

Table 12 Connecting Financial Accounting Concepts and the SOCF	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Q12.1 - How cash flows are presented, classified, recognised and disclosed affects the usefulness of SOCF information for users	1	0	1	26	10	38
Q12.2 To provide relevant information, all entities should classify cash flows in a rigid, uniform, standardized manner within a SOCF	1	9	5	18	5	38
Q12.3 To provide faithfully representative information, all entities should classify cash flows in a uniform manner within a SOCF	1	3	7	23	4	38
Q12.4 The comparability of SOCF information is enhanced by requiring all entities to classify cash flows in a uniform manner	1	2	3	22	10	38
Q12.5 Requiring all entities to classify cash flows in an identical manner increases the level of understandability within the SOCF	1	4	9	19	5	38
Q12.6 Allowing preparers to classify certain cash flows according the nature of their business may result in creative or fraudulent accounting	1	7	14	11	5	38
Q12.7 Allowing preparers to classify cash flows according the specific nature of their business will provide users with more useful information about an entity's cash flows	0	6	9	19	4	38
Q12.8 The amount of interest paid should be recognized and presented as a specific line item within the SOCFs since it is key performance indicator	0	4	10	23	1	38
Q12.9 If key cash flows are only presented in the disclosure notes, it reduces their perceived importance to accounting users	2	5	6	18	7	38
Q12.10 Regardless of their level of materiality, the annual amounts of income taxes and interest paid should be presented and recognized as separate line items with the SOFs	2	5	10	18	3	38
Q12.11 The statement of cash flows contains critical information for valuation of shares	1	13	12	9	3	38
Q12.12 The statement of cash flows contains critical information for predicting corporate financial distress and failure	0	0	18	14	6	38
Q12.13 The statement of cash flows contains critical information for making decision about executive compensation	2	3	20	12	1	38
Q12.14 The statement of cash flows contains critical information for understanding the company's dividend policy	1	8	20	9	0	38

The majority of students (36/38) agreed with or strongly supported the view that presentation, classification, recognition, and disclosure within the SOCF affects the usefulness of this information to users. However, 10/38 disagreed with the notion that rigid uniformity within the SOCF was needed to provide relevant information, although confusingly, 27/38 agreed or strongly agreed that uniformity was necessary to provide faithfully representative information to users. 32/38 agreed or strongly agreed with the notion that comparability is enhanced by requiring all entities to classify cash flows in a uniform manner. Understandability was also seen as being enhanced by uniformity with the statement of cash flows (24/38), although only 16/38 agreed with the idea that creative or fraudulent accounting may result from allowing an entity to classify its cash flows in accordance with the nature of its business. Furthermore, 23/38 respondents agreed with the notion that allowing an entity to classify its cash flows in accordance with the nature of its business would provide users with more decision useful information.

In terms of recognition and disclosure practices within the SOCF, the majority of students wanted key cash flow items, such as interest paid, to be separately recognized as line items within the

SOCF, and 25/38 agreed with the idea that allowing their disclosure by way of note reduces the items perceived importance to users. Furthermore, 21/38 agreed with the view that regardless of the amount or materiality of key cash flow items, such as interest paid, the item should still be separately recognized as a line item.

In terms of the linkage between financial reporting and corporate finance knowledge, only 12/38 students (31.6%) agreed with the statement that the SOCF contains critical information for the valuation of shares, and 20/38 agreed that the statement contains relevant information for predicting financial distress. The majority of students were neutral in terms of their opinion about whether the SOCF provides useful information for making decisions about executive compensation and understanding the company's dividend policy.

The results from part III of the case suggest that students appreciate the need for specific recognition of key cash flows, but are largely in favor of greater uniformity within the SOCF, even if it potentially impacts the faithful representation and relevance of the resultant information. This is surprising, especially as the results in part II indicated that students appreciated the need for a merchandiser to account and classify cash flows in a manner appropriate for its business, i.e. interest paid on a bond was largely seen as a finance activity, whereas interest paid on an unpaid supplier invoice was deemed to be an operating activity.

Analysis of Part IV – Preferences for a certain version of the SOCF and identifying key cash flows

As was described earlier, Part IV provided SCOF information for a small hypothetical dual-listed public company that sells ready-made garden furniture, and students were asked to evaluate which of two alternate SOCF versions produced the most decision useful information, and three further questions that focuses on identifying the amount and classification of interest paid, income taxes paid, and dividends received, within each version of the statement. Versions A and B of the SCOF were prepared in accordance with IAS 7 and SFAS No. 95, respectively, although respondents were not made aware of this information.

Table 13:Preferred version of the SOCF: A or B?

Preferred version from descision usefulness perspective	No.	%
No answer	0	0.0%
Both versions are equally decision-useful	7	18.4%
Version A provides more useful information than Version B	19	50.0%
Version B provides more useful information than Version A	12	31.6%
Total	38	100.0%

In terms of which version provided the most decision useful information about the company for users, 50.0% of students preferred version A, which was prepared in accordance with the reporting requirements of IAS 7. Version A included specific line items within the SOCF for interest paid, income taxes paid, dividends received, and interest received, which allowed users to determine whether they were operating, investing or financing in nature. In contrast, Version B was prepared in accordance with SFAS No. 95, and provided less articulated disclosure on the face of the SOCF. Despite the potential limitations of version B, 31.6% of students stated that this provided more decision useful information, all this result may have been influenced by the fact that U.S. students are conditioned to see certain supplementary cash flow disclosures after the main SOCF.

In order to further investigate the student preference towards version A or B, supplementary questions asked them to both calculate certain cash flows and determine how these amounts were classified within each version. Due to the nature of the Version B SFAS No. 95 disclosure practices used, it was impossible to determine the exact classification of the cash flow, and options were given for "classification cannot be determined". While students who recognized that version B was prepared in accordance with U.S. GAAP, could have assumed, for example, that interest paid was an operating activity, such options were not given as an available answer.

Table 14: Manning Merchandisers: interest paid and its classifcation

Version A			**Version B**		
Amount and classification	**No.**	**%**		**No.**	**%**
No answer	1	2.6%	No answer	2	5.3%
$2,00,000 operating	2	5.3%	$2,00,000 operating	7	18.4%
$600,000 investing	0	0.0%	$9,000,000 financing	1	2.6%
$9,000,000 cannot be determined	0	0.0%	$9,000,000 cannot be determined	22	57.9%
$11,000,000 operating	6	15.8%	$11,000,000 operating	0	0.0%
$9,000,000 financing	27	71.1%	$9,000,000 financing	2	5.3%
$9,000,000 operating	1	2.6%	$1,400,000 operating	1	2.6%
Cannot be determined	1	2.6%	Cannot be determined	3	7.9%
Total	38	100.0%	Total	38	100.0%

In terms of identifying the correct amount of interest paid and its classification, 71.1% and 57.9% of students answered this correctly for versions A and B, respectively (see Table 14). What is clearly evident is that students found it easier to determine the amount and classification of interest paid in version A, where the item was separately recognized as a line item within the statement of cash flows, rather than a supplemental disclosure as in the case of version B. This suggests that presentation and recognition within the SOCF does play a role in the understandability of cash flow information.

Table 15 presents the results of the student calculations and classification of income taxes paid with each version of the SOCF. For version A, 78.9% of students correctly identified that the amount of taxation paid was a $3,000,000 operating outflow. However, only 52.9% of students identified that the version B SOCF included $3,000,000 of unclassified income taxes paid. These

results are in line with those for the interest paid answers, and support the notion that students lack an understanding of how such cash flows are typically calculated and classified. For example, 13.2% of students said that the amount of income taxes paid could not be calculated for either version, and 15.8% of students confused the increase in tax payable with income taxes paid.

Table 15: Manning Merchandisers: income tax paid and its classifcation

Version A			Version B		
Amount and classification	**No.**	**%**		**No.**	**%**
No answer	1	2.6%	No answer	2	5.3%
(a)$4,800,000 operating	0	0.0%	$1,800,000 operating	6	15.8%
(b)$3,000,000 financing	2	5.3%	$3,000,000 financing	1	2.6%
(c)$3,000,000 operating	30	78.9%	$3,000,000 operating	3	7.9%
(d)$3,000,000 investing	0	0.0%	$3,000,000 investing	1	2.6%
(e)$11,000,000 operating	0	0.0%	$3,000,000 cannot be determined	20	52.6%
(f)Cannot be determined	5	13.2%	Cannot be determined	5	13.2%
Total	38	100.0%	Total	38	100.0%

The final question in part IV asked students to determine the amount of dividends received during the year and how this amount was classified in the SOCF. Table 16 illustrates the results, and as with interest paid and income taxes paid, more students correctly identified the amount in the IAS 7 Version A of the SOCFs (63.2%) than version B (60.5%).

Table 16: Manning Merchandisers: dividend received and its classifcation

Version A			Version B		
Amount and classification	**No.**	**%**		**No.**	**%**
No answer	1	2.6%	No answer	2	5.3%
$4,00,000 operating	7	18.4%	$6,00,000 financing	6	15.8%
$4,000,000 investing	24	63.2%	$4,000,000 investing	2	5.3%
$4,000,000 cannot be determined	1	2.6%	$4,000,000 cannot be determined	23	60.5%
$6,000,000 financing	3	7.9%	$4,000,000 financing	2	5.3%
$6,000,000 operating	0	0.0%	$6,000,000 operating	0	0.0%
Cannot be determined	2	5.3%	Cannot be determined	3	7.9%
Total	38	100.0%	Total	38	100.0%

In summary, the results in part IV of the case study supports the notion that presentation, recognition, and disclosure practices within the SOCF have the potential to confuse users when they are interpreting cash flow information. They also support the idea that many U.S. accounting students lack the in-depth awareness of presentation and classification issues, and struggle to calculate key cash flow amounts. This situation is exasperated by having to focus on indirect SOCFs prepared under U.S. GAAP, which effectively disguises the classification of certain cash flows by allowing non-articulated disclosure practices.

VI Discussion and concluding remarks

The preliminary findings signify a few tentative conclusions. What emerged from the study is that both classifying cash flows and analyzing information from the statement of cash flows (SOCF) is a complex area for most respondents. Respondents also claimed a low number of instructional hours on the topic even though cash flow is covered in a number of undergraduate and graduate level accounting courses (Table 3).

The level of competency demonstrated is another area of concern. Surprisingly about 55.3% of the respondents said that the statement of cash flows deals with forecast information, and in the follow up question respondents did not indicate the need to identify recurring cash flows from operating activities for investment/financing decisions. Despite this, 68.4% of the respondents classified interest associated with loan as financing activity (Table 7). A similar result was found when respondents classified interest paid according to the circumstances rather than following the rigid classification (as operating) required in SFAS 95. Another interesting observation was that respondents were able to connect the purpose of the statement of cash flows with FASB/IASB qualitative characteristics such as relevance, faithfulness, comparability, understandability, etc. This is consistent with Bloom (1956) and the "principles- based teaching" advanced in the IFRS literature. Furthermore, a substantial portion (10/38 and 27/38) supported uniformity, and contrary to the empirical literature (Gordon et al 2017) only 16/38 agreed that opportunistic behavior may result from allowing flexibility in classification of cash flows.

Another interesting finding was that despite the textbooks used in U.S accounting schools, 50% of the respondents preferred the statement of cash flows which was prepared in accordance with IAS 7, and felt that it is more decision useful. This might indicate that the respondents did not give enough attention to disclosure that is made in SFAS 95 based statements of cash flow. Notwithstanding this, the finding is consistent with the capital market literature which shows that recognition (line item presentation) and disclosure are not the same. Finally, we find that students struggle to calculate the correct amount for use in performance, debt and investment analysis. In conclusion we argue that the results of the pilot study illustrate that further data should be collected in order to explore issues surrounding the teaching of the SOCF.

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Appendix A

Take Home Case Study

Introduction

The following case is prepared by Accounting faculty at Metropolitan State University of Denver to be used as instrument for investigating student understanding of the differences between IFRS and U.S GAAP based statement of cash flows (SOCF). The case aims to evaluate both conceptual and experiential learning of the student. It is designed to be a test and counts towards your final grade for this course. Please note that your score in the test and your institution will be completely anonymized, and the data will be used for research and the result may be published in an academic journal. There is no known harm or discomfort that is expected from participating in the study. If you do not want to participate in the research, please indicate that in the form below and you will be assigned another work. Note also that for certain questions there are no right or wrong answers.

I agree/disagree (please circle) that the data be used for research.

The case study below should take no more one hour to complete. The test is an individual work intended to assess your degree *of accounting competency*, and hence any form of cheating and lack of academic integrity shall be dealt in accordance with the student handbook.

Part I Respondent profile

Please complete the following questions. Please circle your answers.

1. What type of academic program are you currently enrolled on?
    a. Undergraduate
    b. Graduate
    c. Combined undergraduate & graduate program

2. What is your current enrollment status?
    a. Senior
    b. Graduate
    c. Other please specify _____

3. How many years of accounting-related work experience do you have?
    a. None
    b. 1-2
    c. 3 or more

4. To this point in your accounting education, approximately how many hours of teaching instruction have you had on preparing and understanding the statement of cash flows
    a. None
    b. 1-3
    c. 4-6
    d. 7-9
    e. 10 or more

5. Please indicate which of the following undergraduate classes/courses are you currently taking, or have successfully completed, as a student?

Undergraduate courses at MSU Denver	
(a) Intermediate Accounting I, ACC 3510	O
(b) Intermediate Accounting II, ACC 3520	O
(c) International Accounting, ACC 3750	O
(d) Advanced Accounting, ACC 4510	O
(e) Auditing, ACC 4200	O
(f) Managerial finance, FIN 3300	

6. Please indicate which of the following graduate classes are you currently taking, or have successfully completed, as a student?

Graduate level courses at MSU Denver	
(a) Accounting communication & research ACCM 5020	O
(b) Accounting Theory, ACCM 5510	O
(c) Financial Statement analysis and quantitative methods, ACCM 6580	O

Part II: General Questions about the cash flow statement

Assume that you are working for Aurora Accounting Analytics (AAA) a company provides accounting services to small and medium sized companies. You have been requested by Amy Johnstone, the new Chief Financial Officer (CFO) of AAA to prepare and examine the decision usefulness of the Statement of Cash Flows for a company that has the option of preparing its financial statements under U.S GAAP or IFRS.

7. In your opinion the objective of the statement of cash flows is to provide periodic information about:
    a. Forecast changes in cash and cash equivalents
    b. Forecast changes in cash
    c. Historical changes in cash
    d. Historical changes in cash and cash equivalents

8. In your opinion a merchandising entity that receives cash from dividends received should classify it as follows within the SOCF:
    a. As an operating activity
    b. As an investing activity
    c. As a financing activity
    d. May be classified as either an investing or operating activity

9. In your opinion a merchandising entity that pays loan interest on a 25 year bond, should classify it as follows within the SOCF:
    a. As an operating activity
    b. As an investing activity
    c. As a financing activity
    d. May be classified as either a financing or operating activity

10. In your opinion a merchandising entity that pays an interest penalty on an unpaid supplier invoice should classify it as follows within the SOCF:
    a. As an operating activity
    b. As an investing activity
    c. As a financing activity
    d. May be classified as either a financing or operating activity

11. In your opinion In order to provide useful information for users, a merchandising entity should prepare its SOCF in accordance with which of the following methods:
    a. Only the accrual method
    b. Only the direct method
    c. Only the indirect method
    d. The entity may use the indirect or direct method

12. In your opinion a merchandising entity preparing its SOCF should present interest paid as follows:
    a. Recognized and articulated as a specific line item within the SOCFs
    b. Included as a disclosure note within the notes to the financial statements
    c. Presented as an entirely separate unarticulated disclosure note on the same page as the SOCF
    d. The entity is free to use any of the presentation methods described above

Part III Integration of the statement of cash flows with the objectives of financial statements.

The following questions aim at assessing the integration of the preparation of the statement of cash flows with the objectives and qualitative characteristics of financial statements as defined in FASB (Concept Statement #8) and IASB conceptual Framework.

13. Please indicate your level of agreement with each of the following statements.

	Statement	**Strongly disagree (1)**	**Disagree (2)**	**Neither agree or disagree (3)**	**Agree (4)**	**Strongly agree (5)**
13.1	How cash flows are presented, classified, recognized and disclosed affects the usefulness of SOCF information for users	o	o	O	o	o
13.2	In order to provide relevant information, all entities should be required to classify cash flows in a rigid, uniform, standardized manner within a SOCF	o	o	O	o	o
13.3	In order to provide faithfully representative information, all entities should be required to classify cash flows in a uniform manner within a SOCF	o	o	O	o	o
13.4	The comparability of SOCF information is enhanced by requiring all entities to classify cash flows in a uniform manner	o	o	O	o	o
13.5	Requiring all entities to classify cash flows in an identical standardized manner increases the level of understandability within the SOCF	o	o	O	o	o
13.6	Allowing preparers to classify certain cash flows according the specific nature of their business may result in creative or fraudulent accounting	o	o	O	o	o
13.7	Allowing preparers to classify certain cash flows according the specific nature of their business will provide users with	o	o	O	o	o

	more useful information about an entity's operating, investing and financing cash flows					
13.8	The amount of interest paid should be recognized and presented as a specific line item within the SOCFs since it is key performance indicator for most users.	o	o	O	o	o
13.9	If key cash flows are only presented in the disclosure notes, it reduces their perceived importance to accounting users.	o	o	O	o	o
13.10	Regardless of their level of materiality, the annual amounts of income taxes and interest paid should be presented and recognized as separate line items with the SOFs	o	o	O	o	o
13.11	The statement of cash flows contains critical information for valuation of shares	o	o	O	o	o
13.12	The statement of cash flows contains critical information for predicting corporate financial distress and failure	o	o	O	o	o
13.13	The statement of cash flows contains critical information for making decision about executive compensation	o	o	O	o	o
13.14	The statement of cash flows contains critical information for understanding the company's dividend policy	o	o	O	o	o

Part IV: Preparation, classification, evaluation questions

14. Amy Johnstone now wishes you to evaluate two alternate formats for the presentation of the statement of cash flows (SOCF) prepared by Manning Merchandisers, a small dual listed public company that sells ready-made garden furniture. Due to having its stock listed on two different stock markets, Manning can prepare its SOCF in accordance with one of two alternate reporting frameworks. Amy produced Version A, while the CFO of Manning produced Version B. Manning expects to acquire a competitor in March 2019, and just completed a variety of financing activities to fund this acquisition. The following information is made available:

    - During 2018, the company purchased $25,000,000 of new retail equipment and sold a $5,000,000 plot of land. On 1/1/2018 equipment with a carrying value of $3,000,000 was sold for $4,000,000.
    - Dividends of $6,000,000 were paid to shareholders on 1 July 2018, and the company received $4,000,000 of dividend income and $600,000 of interest income during the year.
    - The yearly interest expense on the entity's long-term bank loan was $11,000,000.

Version A
Manning Merchandisers
Statement of Cash flows for year ended 31 Dec 2018

	$000s	$000s
Cash generated from operations		
Profit before tax		21,000
Add back depreciation	8,000	
Add back profit on disposal of equipment	(1,000)	
Increase in inventory	(9,000)	
increase in net accounts receivable	(18,000)	
increase in trade payables	4,000	
Add back interest expense	11,000	
Deduct interest receivable	(2,000)	
Deduct dividend income	(4,000)	(11,000)
Cash generated from operations		10,000
Taxation paid		(3,000)
Net cash from operating activities		7,000
Cash flows from investing activities		
Proceeds from sale of equipment	4,000	
Proceeds from sale of land	5,000	
Interest received	600	
Dividends received	4,000	
Acquisition of retail equipment	(25,000)	
Net cash outflow from investing activities		(11,400)
Cash flows from financing activities		
Cash from stock issue	3,000	
Interest paid	(9,000)	
Dividends paid	(6,000)	
Proceeeds from increase in bank loan	44,000	
Net cash from financing activities		32,000
Net Increase (decrease) in cash and cash equivalents		27,600
Cash and cash equivalents at beginning of period		18,000
Cash and cash equivalents at the end of the period		45,600

Version B
Manning Merchandisers
Statement of Cash flows for year ended 31 Dec 2018

	$000s	$000s
Cash generated from operations		
Profit for the period		16,200
Add back depreciation	8,000	
Add back profit on disposal of equipment	(1,000)	
(Increase) Decrease in inventory	(9,000)	
(Increase) Decrease in net accounts receivable	(18,000)	
Increase (Decrease) in interest payable	2,000	
(Increase) Decrease in interest receivable	(1,400)	
Increase (Decrease) in trade payables	4,000	
Increase (Decrease) in taxes payables	1,800	(13,600)
Net cash outflow from operating activities		2,600
Cash flows from investing activities		
cash proceeds from sale of land	5,000	
Cash proceeds from sale of retail equipment	4,000	
Acquisition of retail equipment	(25,000)	
Net cash outflow from investing activities		(16,000)
Cash flows from financing activities		
Cash proceeds from stock issue	3,000	
Dividends paid	(6,000)	
Proceeeds from increase in bank loan	44,000	
Net cash from financing activities		41,000
Net Increase (decrease) in cash and cash equivalents		27,600
Cash and cash equivalents at beginning of period		18,000
Cash and cash equivalents at the end of the period		45,600

Notes to the financial Statements
Note 1: Additional Financial information
Cash paid for interest and income taxes during the year was:

	$000s
Cash paid for interest	(9,000)
Cash paid for income taxes	(3,000)

Dividends and interest income received during the year was:	$000s
Dividend received	4,000
Interest received	600

15. In your opinion, which of the two statement cash flows (SOCFs) provides the most decision-useful information about the company for users?
    a. Both versions are equally decision-useful
    b. Version A provides more useful information than Version B
    c. Version B provides more useful information than Version A
    d. Neither version provides useful information

16. In each version of the company's statement of cash flows, how much interest was paid during 2018, and how was this cash outflow classified?

Version A		Version B	
(a) $2,00,000 operating	O	$2,00,000 operating	O
(b) $600,000 investing	O	$9,000,000 financing	O
(c) $9,000,000 classification cannot be determined	O	$9,000,000 classification cannot be determined	O
(d) $11,000,000 operating	O	$11,000,000 operating	O
(e) $9,000,000 financing	O	$9,000,000 financing	O
(f) $9,000,000 operating	O	$1,400,000 operating	O
(g)Cannot be determined	O	Cannot be determined	O

17. In each version of the company's statement of cash flows, how much income tax was paid during 2018, and how was this cash outflow classified?

Version A		Version B	
(a)$4,800,000 operating	O	$1,800,000 operating	O
(b)$3,000,000 financing	O	$3,000,000 financing	O
(c)$3,000,000 operating	O	$3,000,000 operating	O
(d)$3,000,000 investing	O	$3,000,000 investing	O
(e)$11,000,000 operating	O	$3,000,000 classification cannot be determined	O
(f)Cannot be determined	O	Cannot be determined	O

18. In each version of the company's statement of cash flows, how much dividend income was received during 2018, and how was this cash inflow classified?

Version A		Version B	
(a)$4,00,000 operating	O	$6,00,000 financing	O
(b)$4,000,000 investing	O	$4,000,000 investing	O
(c)$4,000,000 classification cannot be determined	O	$4,000,000 classification cannot be determined	O
(d)$6,000,000 financing	O	$4,000,000 financing	O
(e)$6,000,000 operating	O	$6,000,000 operating	O
(f)Cannot be determined	O	Cannot be determined	O

Part V Application, analysis and judgment

Assume 2018 was a typical year for Manning Merchandizers, and the earnings are expected to remain the same for the forecast horizon. Use the SOCFs prepared earlier and the following additional information please answer the final set of questions.

Income Statement Data for Y/E 12/31/2018	$000s
Profit for the period	16,200
Revenue	125,000

Balance Sheet Data at 12/31/2018	$000s
Non-current assets	30,000
Current assets	91,000
Equity	36,200
Non-current liabilities	70,000
Current liabilties	14,800

Other performance data	000s
Weighted average shares outstanding	64,000
Earnings per share for Y/E 12/31/2018	$ 0.25
Market share price at 12/31/2018	$ 6.00
Price earnings	24

Ratios	Version A SOCF	Version B SOCF
Operating cash flow / revenue	5.60%	2.08%
Operating cash flow per share	$ 0.11	$ 0.04
Current ratio	1.43	1.43
Share Price / operating cash flow per share	55	148

Questions 19 to 24 relate to classification/presentation/ and its consequences. Examine the table below and answer the questions.

Assume further that Amy Johnstone attended a continuous professional development course organized by the local chapter of the AICPA. The speaker, a senior partner from the Head Office of one of the global audit firms, produced the following table that helps the participants understand the differences between IFRS and U.S. GAAP based cash flow statements. Amy Johnstone recalled her undergraduate and graduate level accounting courses at MSU Denver.

	IASB – IFRS IAS 7	**FASB – U.S. GAAP SFAS 95**	
	Direct and Indirect Methods[1]	**Direct Method[2]**	**Indirect Method[3]**
Interest paid	Operating or Financing [D]	Operating [R]	Operating [D]
Interest received	Operating or Investing [D]	Operating [R]	Operating *
Dividends received	Operating or Investing [D]	Operating [R]	Operating *
Dividends paid	Financing or Operating [D]	Financing	Financing
Income taxes paid	Operating [D] (unless specifically financing or investing)	Operating [R]	Operating [D]

[**R**] Separate reporting mandatory within the SCF
[**D**] Separate disclosure mandatory
[*] No mandatory separate recognition or disclosure

Definition
Financing: activities and transactions that raise capital for an entity and return cash to creditors and shareholders
Investing: activities that include the acquisition and disposal of property, plant and equipment, other long-term assets and other investments; and
Operating: activities not classified as financing or investing; activities that are involved with the main revenue-generating portion of the business
Sources: Spiceland, Sepe, and Nelson 2011, 200); [1] (IASB IAS 7 par. 31 to 36); [2] (FASB ASC par. 230-10-45-16 to 17); [3] (FASB ASC par. 230-10-50-2); https://www.iasplus.com/en-us/standards/ifrs-usgaap/cashflows); and ACCM 6950 student research projects.

19. In your opinion which of the following statement is true?
(a) A cash flow statement that is prepared under IAS 7 is vulnerable to opportunistic classification of interest and dividends, and hence lacks representational faithfulness.
(b) A cash flow statement that is prepared under SFAS 95 is vulnerable to distortion of economic reality because interest received/paid and dividends received are rigidly classified as operating cash flows.
(c) Both A and B are correct.
(d) None of the above

20. Assume now that Manning has the option of preparing the cash flow statement under either method (IAS 7 or SFAS 95). Which version of the cash flow statement would the client most likely prefer to use, if its executives were paid a bonus based upon the information presented in the statement of cash flows? Assume further that interest expenses is higher than interest income.

A. The client company managers would have no preference for either version
B. The client company managers would most likely prefer a cash flow statement prepared under IAS 7
C. The client company managers would most likely prefer a cash flow statement prepared under SFAS 95
D. None of the above

21. Assume now that Manning's financial statements are going to be submitted to the Loan Officer of a bank. Which version of the cash flow statement provides the most useful information about the entity's ability to repay and service its debt?

a. The loan officer would not prefer either version. He/she would reconstruct the figures and recalculate the ratios
b. He/she prefers the cash flow statement prepared under IAS 7
c. He/she prefer the cash flow statement prepared under SFAS 95
d. None of the above

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22. Assume now that your role is that of an investment advisor. If you were to buy the shares of this company on behalf of a client (individual), which version of the cash flow statement contains the information you need for fundamental valuation?

(a) Cash flow statement prepared under IAS 7
(b) Cash flow statement prepared under SFAS 95
(c) Both versions are equally useful, In any case I would have to determine the input I need for valuation
(d) None of the above

23. Assume now that the CFO of a client company is considering whether and how much divided should be paid for the year.

(a) He/she would likely keep the dividend level at the same level as last year because of the clientele.
(b) He/she would likely increase dividends because the cash flow from operation is higher in cash flow statement prepared under IAS 7
(c) He/she would likely decrease dividends because cash flow from operation is lower in cash flow statement prepared under SFAS 95
(d) None of the above

If you have comments about this test, please state your comments in the space provided below.

End of the case study