

2009

Business Analysis in Information Systems Curriculum: Implications of Business Analysis Professionalization

Anna Sidorova

University of North Texas, anna.sidorova@unt.edu

Follow this and additional works at: <http://aisel.aisnet.org/amcis2009>

Recommended Citation

Sidorova, Anna, "Business Analysis in Information Systems Curriculum: Implications of Business Analysis Professionalization" (2009).
AMCIS 2009 Proceedings. 578.

<http://aisel.aisnet.org/amcis2009/578>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2009 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Business Analysis in Information Systems Curriculum: Implications of Business Analysis Professionalization

Anna Sidorova
University of North Texas,
Denton, TX 76210
Anna.sidorova@unt.edu

ABSTRACT

Within the Information Systems Discipline, business analysis has traditionally been considered a part of system development, and is usually taught as a part of systems analysis and design courses. Recent years however, have seen professionalization of business analysis which has culminated in the establishment of the International Institute of Business Analysis (IIBA). Since its incorporation in 2006, IIBA released a Guide to the Business Analysis Body of Knowledge (BA BOK) and now offers a Certified Business Analysis Professional (CBAP) certification. This paper examines the implications of such professionalization of the field of business analysis for IS education, identifies the gaps between the BA BOK and the traditional core IS curriculum and suggests directions for closing such gaps. Broader implications of BA professionalization for the IS discipline identity are also discussed.

Keywords

Business analysis, systems analysis and design, IS curriculum, IS education.

INTRODUCTION

Information systems discipline emerged on the intersection of engineering (mainly computer science) and social sciences (management, economics, sociology and psychology) in response to the need to understand the complex inter-relationships among the Information Technology (IT), human behavior and social structures. Yet, the multi-disciplinary origins made it more challenging for the IS discipline to establish its unique identity and gain legitimacy as an academic discipline (Benbasat and Zmud 2003). Although the debate over the IS discipline identity focused primarily on academic research (e.g. Robey 2003, Agarwal and Lukas 2005) with curriculum issues largely dictated by the industry demands, a distinct identity of the IS curriculum may be equally important for the long-term development of the discipline. Although significant work has been done in defining the core IS curriculum at both graduate and undergraduate levels (Gorgone et al 2002, Gorgone et al 2005, Topi et al. 2008), the focus of this has been on standardization of the curriculum to make it applicable to IS education in a variety of disciplines. This resulted in similar courses often being taught by several academic departments within the same educational institution.

During the years of the booming enrollment in all fields related to IT the lack of attention to differentiating IS curriculum thorough focusing on the core teaching competency of IS faculty was forgivable: the demand by far exceeded the supply so there was not need to compete for students. However, as the IT enrollments declined dramatically following the dot-com bust and the wave of IT off-shoring (for discussions on the IS enrollment crisis see Granger et al. 2007, Firth et al. 2008), different academic departments and colleges now compete for the few technically inclined students. Anecdotal evidence suggests that IS departments in business schools are among the hardest hit by declining enrollments. On one hand they compete for students with other business disciplines such as accounting, marketing and management, which are perceived less technical and perhaps less demanding; on the other hand they need to help their students compete with those graduating with a degree in computer science who are often perceived to have stronger technical skills. This naturally raises a question: If the core of IS curriculum can be, and frequently is, taught by other academic units such as computer science departments, are IS departments in business schools redundant? The fact that business-IT alignment consistently remains among the top issues faced by CIOs (Luftman and Kempaiah 2007, 2008) suggests that there is a need, apparently still unmet, for professionals with deep understanding of both IT and business. Therefore, there appears to be an important niche for business IS education, but IS departments in business schools need to differentiate themselves to be able to successfully address the needs of this niche.

One possible opportunity for such differentiation stems from the recently ongoing professionalization of the business analysis (BA) field championed by the International Institute of Business Analysis (IIBA), which now offers a professional certification and leads efforts in establishing a standardized BA body of knowledge. *The purpose of this paper is to discuss*

the implications of such BA professionalization for teaching IS in business schools, with the focus on identifying and addressing gaps in IS curriculum coverage of the Business Analysis Body of Knowledge. In the rest of the paper I discuss the creation of the IIBA, its goals and initiatives, the BA Body of Knowledge (BA BOK) and the certification offered by the IIBA. I then review the current state of IS curriculum with the focus on business analysis (BA). The paper further compares the coverage of specific topics included by the IIBA in the BA BOK and identifies key gaps. Directions for closing such gaps, as well as broader implications of BA professionalization for teaching IS in business schools are then discussed. The paper concludes by discussing directions for future research.

INTERNATIONAL INSTITUTE OF BUSINESS ANALYSIS

The International Institute of Business Analysis (IIBA) is a not-for-profit professional organization with the mission “to develop and maintain standards for the practice of business analysis and for the certification of its practitioners” (IIBA, 2009). The IIBA was originally established in 2003 and federally incorporated in Canada in 2006; it currently has over 5000 members with over 100 chapters worldwide (IIBA, 2009). On its official Web site, the IIBA lists the development of the BA Body of Knowledge and offering BA professional certification, Certified Business Analysis Professional (CBAP), among its strategic goals. CBAP is awarded to BA professionals with hands-on work experience in business analysis (which is assessed during the application process) who successfully pass the IIBA CBAP examination (IIBA, 2009). The IIBA strives to establish the recognition of business analysis as a valuable profession and provides a forum for knowledge sharing among BA professionals. For example, individual IIBA chapters organize study groups to help prepare for the IIBA CBAP examination. The creation of the CBAP is a significant step towards establishing Business Analysis as recognized profession as it creates common standards of knowledge which should be possessed by business analysis professionals. The creation of such common BA knowledge standards will necessarily influence industry expectations regarding skills and knowledge of university graduates with degrees in areas related to business analysis, such as IS.

Business Analysis Body of Knowledge

As a part of its mission, the IIBA compiles and releases *The Guide to the Business Analysis Body of Knowledge*, which codifies knowledge needed by business analysis professionals and is the recommended study guide for the CBAP professional certification¹. The *Guide to BA BOK* focuses on the description of the body of knowledge rather than providing specific methodological guidance and detailed “how-to” advice. To ensure broad applicability, the guide strives to remain methodologically neutral and to offer equal coverage of different methodologies and techniques. Yet the guide offers a detailed process-oriented view of business analysis and a comprehensive inventory of business analysis techniques, which may be used at various stages of business analysis.

The *Guide* defines business analysis as “the set of tasks, knowledge, and techniques required to identify business needs and determine solutions to business problems.” (IIBA 2006, p.8). The business needs represent the requirements for a business solution, therefore the six core business analysis knowledge areas are defined in relation to such requirements. The six areas include:

- Enterprise Analysis
- Requirements Planning and Management
- Requirements Elicitation
- Requirements Communication
- Requirements Analysis and Documentation
- Solution Assessment and Validation.

Of these knowledge areas, four, including *Enterprise Analysis*, *Requirements Elicitation*, *Requirements Analysis and Documentation* and *Solution Assessment and Validation*, are conceptualized as sequential stages of the business analysis process, whereas *Requirements Planning and Management* and *Requirements Communication* represent continuous processes that span all stages of business analysis. The guide describes key tasks related to each of the knowledge areas in terms of the input, process and output, as well as most widely used techniques used to perform these tasks. Although the IIBA does not restrict the goal of business analysis to developing IT-based solutions, there is a great overlap between the BA knowledge areas defined by the IIBA and the material traditionally taught in systems analysis and design courses as a part of IS

¹ At the time of preparation of this manuscript, v 1.6 is considered an official version and is publicly available at http://www.theiiba.org/Content/NavigationMenu/Learning/BodyofKnowledge/Version16/BABOK_V1_6.pdf Release of version 2.0 is scheduled for March 2009.

curriculum. Therefore, IS faculty, especially those at business schools, may be in the best position to offer BA-focused education. In the next section I review the state of IS curriculum and the place of business analysis within this curriculum.

THE STATE OF THE IS CURRICULUM

Significant work towards the development and standardization of the IS curriculum was undertaken during the past decades. Early curriculum models were introduced in 1970s, which were followed by the development of curriculum models by ACM and AITP (Gorgone et al., 2003). The most notable recent works related to IS curriculum include the “IS 2002, Model Curriculum and Guidelines for Undergraduate Degree Programs in Information Systems” (Gorgone et al., 2003), which was produced by a joint ACM, AIS and AITP task force as a part of a broader *Computing Curricula 2001* project. The report was recently updated with new recommendations based on the work of the ACM/AIS undergraduate curriculum task force (Topi et al, 2008). Efforts related to the undergraduate curriculum development were mirrored with reports focused on graduate IS curriculum (Gorgone et al. 2005, Gorgone et al. 2006). The model curriculum reports provide recommendations regarding IS course offerings and their sequence, as well as specific topics to be covered in each of the recommended courses. *IS 2002* curriculum core course structure includes 11 courses, which generally relate to the six core topics identified in the 2008 update (see Table 1).

	IS 2002 core courses (Gorgone et al. 2001)	Core IS topics (Topi et al 2008)						Knowledge of Business Fundamentals/ (R) Required/ (D) Desirable/ (O)Optional?
		Foundations and role of IS	Data and Information	Systems Analysis and Design	IT infrastructure	Project Management	Application Development	
IS 2002.1	Fundamentals of Information Systems	X						D
IS 2002.2	Electronic Business Strategy, Architecture and Design			X			X	R
IS 2002.3	Information Systems Theory and Practice	X						D
IS 2002.4	Information Technology Hardware and System Software	X			X			O
IS 2002.5	Programming, Data, File and Object Structures						X	O
IS 2002.6	Networks and Telecommunication				X			O
IS 2002.7	Analysis and Logical Design			X				R
IS 2002.8	Physical Design and Implementation with DBMS		X					O
IS 2002.9	Physical Design and Implementation in Emerging Environments						X	O
IS 2002.10	Project Management and Practice					X		D

Table 1. *IS 2002* core courses and Topi 2008 core topics.

BA as a part of Systems Analysis and Design courses

While the *IS 2002* model curriculum is designed to prepare graduates for a variety of career paths, including those of Business Process Analyst and Database Analyst, only one of the suggested core courses, IS 2002.7 (Analysis and Logical

design), deals directly with business analysis issues. According to the *IS 2002*, Analysis and Logical Design course is expected to cover a number of topics including "...concepts and skills necessary to do the analysis, modeling, and definition of IS problem, [...] how to collect and structure information in the development of requirements and specifications, [...] how to analyze organizational systems to determine how the systems might be improved, [...] to demonstrate and analyze small group dynamics as related to working with users" (Gorgone, 2002, p. 46) and so on.

Although many of the suggested Analysis and Logical Design topics deal with analysis issues, the course also includes a variety of subjects related to logical design. In addition, the course is not designed to match specific BA knowledge area (not surprisingly so, since the model curriculum predates the *BA BoK* by five years). In Table 2 I attempt to relate the suggested topics of the Analysis and Design class to the six core BA knowledge areas.

IS 2002 Learning Unit #	IS2002.07 Analysis and Logical Design Learning Unit Goal	General BA concepts	BA Knowledge Area						Non BA
			Requirements Planning & Mgmt	Enterprise Analysis	Requirements Elicitation	Requirements Analysis	Solution Selection and Validation	Requirements Communication	
72	To present necessary concepts to provide the skills necessary to do the analysis, modeling, and definition of information systems problems	X							
73	To give students exposure to using commercial program products to implement information systems								X
74	To show how to collect and structure information in the development of requirements and specifications				X	X			
75	To show how to develop a logical design, and develop and analyze alternatives involving implementation using packages, tailoring of packages, constructing software, or CASE tools								X
76	To develop a functional understanding of rapid prototyping and other similar alternative mechanisms for rapid development of information systems	X							X
77	To show how to assess risks and feasibility			X					
78	To show students how to analyze organizational systems to determine how the systems might be improved	X		X		X			
79	To develop skills for effective interpersonal communication to develop consensus using classical techniques as well as computer facilitated groupware			X	X			X	
80	To demonstrate and analyze small group dynamics as related to working with users				X			X	
81	To develop application skills for implementing databases and applications by operating and testing these databases								X
82	To present and use complexity metrics to assess developed solutions						X		X
83	To develop quality metrics for assessment of software development and project control of software development								X
84	To develop quality metrics for assessment of customer satisfaction at all phases of the life cycle						X		
85	To explain the use of a professional code of ethics to evaluate specific IS actions	X							X

Table 2. Comparison of the IS2002.07 Analysis and Logical Design course content to BA knowledge areas

Table 3 relates specific BA tasks and techniques discussed in the *BA BOK* to the IS 2002 learning units. Because course content is often influenced by the content of major textbooks, Table 3 also compares the BA BOK core knowledge areas and related tasks to the thematic coverage offered by two widely adopted books on Systems Analysis and Design.

BA Knowledge Areas and Related Tasks and Techniques (IIBA 2006)		IS model Curriculum Learning Unit #	Hoffer, George & Valacich	Kendall & Kendall
Enterprise Analysis	Creating and maintaining the Business Architecture	#78		-
	Conducting feasibility studies	#77	X	X
	Determining project scope		X	X
	Preparing the business case	#77	X	X
	Conducting the initial risk assessment	#77		-
	Preparing the decision package		X	X
	Selecting and prioritizing projects		X	X
	Launching new projects		X	X
	Managing projects for value			-
Requirements Planning and Management	Understand team roles and stakeholders	#74		-
	Define requirements risk approach	#74		-
	Determine planning considerations	#74	X	X
	Select and estimate requirements activities	#74	X	X
	Manage requirements scope	#74		-
	Measure and report on requirements activity	#74		-
	Manage requirements change	#74		-
Requirements Elicitation	Interviews, Observations, Surveys	#74	X	X
	Document analysis	#74	X	X
	JAD, Prototyping	#74, 79, 80	X	X
	Other (brainstorming, focus groups, workshops, interface analysis, reverse engineering etc.)	#74, 79, 80		-
Requirements Analysis and Documentation	Structure requirements packages	#74	X	X-
	Create business domain model	#74, #78		-
	Analyze functional requirements	#74, #78	X	X
	Analyze quality of service requirements	#74, #78	X	X
	Determine assumptions and constraints	#74, #78	X	X
	Document requirements	#74	X	X
	Validate and verify requirements	#74, #78		-

Table 3. BA Knowledge Areas Coverage in IS curriculum and SA&D Textbooks

BA Knowledge Areas and Related Tasks and Techniques (IIBA 2006)		IS model Curriculum Learning Unit #	Hoffer, George & Valacich (2008)	Kendall & Kendall (2008)
Requirements Communication	Create a requirements communication plan			
	Manage requirements conflicts	#79, 80, 84		
	Determine appropriate requirements format		X	X
	Create a requirements package		X	X
	Conduct a requirements presentation			
	Conduct a formal requirements review			
	Obtain requirements signoff			
Solution Assessment and Validation	Develop alternate solutions	#75		
	Evaluate technology options	#75	X	X
	Facilitate the selection of a solution	#75	X	X
	Ensure the usability of the solution	#84	X	X
	Support the quality assurance process	#83, 84	X	X
	Support the implementation of the solution	#75, 76, 83	X	X
	Communicate the solution impacts			
	Post implementation review and assessment	#84		

Table 3 cont'd. BA Knowledge Areas Coverage in IS curriculum and SA&D Textbooks

Discrepancies between IS curriculum and BA BOK

As evident from the Tables 2 and 3, all BA BOK knowledge areas can be related to one or more IS 2002 learning units and are covered, at least to some extent, in SA&D textbooks. Yet there are certain gaps, which if closed will help strengthen business IS education. These gaps include insufficient attention to the process aspects of business analysis as a whole; as well as to such knowledge areas as enterprise analysis, especially in the part of developing business architecture; requirements communication; solution assessment and validation. These specific gaps are detailed below. In addition, many important BA tasks and techniques are discussed superficially and, judging by the number of chapters and sections devoted to them in textbooks, are expected to be covered in a relatively short time. A need for devoting more class time to business analysis topics is discussed in the next section.

Process aspects of business analysis

While traditional analysis and design courses teach many techniques used in business analysis, including project scheduling techniques, requirements elicitation techniques, data and process modeling techniques and so on, such courses often do not discuss business analysis as a process. This may lead to the lack of awareness of certain important tasks that need to be performed as a part of business analysis, such as structuring requirements packages or validating requirements. Another benefit of the process view of BA adopted by the *Guide to BA BOK* is that it shows the inter-relationships among tasks via the flow of inputs and outputs.

Enterprise analysis

Although many aspects of enterprise analysis, such as feasibility studies, preparing a business case and IS project selection are discussed in traditional SA&D courses, little or no attention is usually paid to developing and maintaining business architecture in spite of the increasing recognition of the importance of it in IS practice and research (e.g. Ross et al 2006). Specifically, many SA&D textbooks do make no mention of enterprise architecture frameworks, such as Zachman’s EA framework and the POLDAT framework. This turns students’ attention to individual application and away from the

architectural issues and how these application fit together to achieve organizational goals. Increasing focus on developing business architecture as the first important step in IS development would offer students a better understanding of the inter-relatedness between business and IT and, in the long run, may actually address the issue of business-IT alignment.

Requirements communication

Requirements communication is a vital area of business analysis and it is least covered in traditional IS courses and SA&D textbooks. Although students are often required to communicate system requirements in the form of proposals, project reports and presentations as a part of their course projects, SA&D textbooks provide little guidance regarding the format and content of such presentations and instructors may fail to allocate sufficient time to the discussion of such vital issues.

Solution Assessment and Validation

Solution assessment and validation occurs during and after the implementation stage. While some aspects of solution assessment such as quality assurance and testing are usually discussed in implementation chapters in SA&D books, some other important aspects tend to be overlooked, including those related to communicating solution impacts and conducting post-implementation reviews.

CLOSING THE GAP BETWEEN BA BOK AND IS CURRICULUM AS AN OPPORTUNITY FOR THE IS EDUCATION

The identified discrepancies between the *BA BoK* and IS curriculum highlight a unique opportunity for IS programs in business schools for differentiation through emphasizing knowledge and skills related to business analysis. At a strategic level, higher emphasis on enterprise analysis, business architecture and requirements communication and management may help address the issue of business-IT alignment. At a tactical level, focusing on offering knowledge consistent with a recognized professional certification (and encouraging students to obtain such certification) would provide IS departments within business schools with a unique point of differentiation. In this section I discuss specific steps which may be taken by IS faculty to bring their curriculum more in line with the *BA BoK*.

Short-Term Tactical Steps

Implementing dramatic changes to academic curriculum, such as creation of new courses, is often a difficult and lengthy process due to institutional factors, resource restrictions, risk considerations and so on. Therefore, this section offers several suggestion of minor changes to Systems Analysis and Design courses, which would help cover more of the BA BoK topics.

1. Make students aware of the IIBA and the CBAP certification. This will show them a career path directly related to the contents of the course and may encourage them to pay more attention to the “soft” issues.
2. Include the IIBA *Guide to the BA Body of Knowledge* as an additional required reading for the Systems Analysis and Design course. While the *Guide* does not include sufficient details on how to use specific techniques, such as DFDs, class diagrams and so on, it is a useful reference material for topics that are not extensively covered in traditional Systems Analysis and Design textbooks.
3. Discuss the knowledge areas of BA and relate them to traditional Systems Analysis and Design categories, for example, to the stages of the Systems Development Life Cycle.
4. Incorporate discussions on the process of business analysis, key tasks involved and the inter-dependency among those tasks. Although any prescribed sequence may not be applicable to a specific project, representing business analysis as a process will help the students integrate the acquired knowledge. This is especially true if the BA process is represented graphically. Process orientation also helps attracting attention to important business analysis tasks that are frequently overlooked because there may be little “how-to” knowledge related to them.
5. Add a lecture on enterprise analysis and developing and maintaining business architecture. Although one lecture is too short to cover all aspects of enterprise analysis in sufficient details, mere exposure to such concepts as business architecture would increase students’ awareness of the broader business environment and the it importance for successful IS development.
6. Discuss aspects of requirements planning as a part of the traditional requirements elicitation lecture. This may include emphasizing stakeholder analysis; tasks identification and works assignment strategies and so on. As a bonus, the *Guide to BA BoK* offers a rather comprehensive discussion of requirements elicitation techniques with process description and key strength and weaknesses for each of those techniques. Although traditional textbooks usually cover selected elicitation techniques in greater details, the structured description of a wide variety of techniques offered by the *Guide to BA BoK* is rather useful.
7. Discuss issues of requirements communication, solution assessment and verification throughout the SA&D course. Discuss the role of requirements at design and development stages, as well as the importance of requirements traceability throughout the systems implementation stage. A lecture on systems implementation and testing is an excellent time to revisit the issue of requirements communication and verification.

Long-Term Strategic Steps

In order to fully take advantage of BA as a differentiation opportunity, the amount of classroom time devoted to business analysis needs to be extended. Because of the growing variety of development methodologies and software acquisition techniques, Analysis and Logical Design courses tend to be overloaded (Satzinger, 2007) and may not be an adequate venue for an in-depth discussion of business analysis topics. Although defining specific course offerings is beyond the scope of this paper, the following observations may provide an insight into the time allocation needs for specific topics.

Enterprise analysis, including business architecture development, conducting feasibility studies, business case development and project selection, is a rather extensive and complex undertaking. Most key problems plaguing the IS profession can be traced to insufficient knowledge and attention to various aspects of enterprise analysis: these include misalignment between business and IT, system integration problems, difficulties in evaluating and tracing economic impact of IT, difficulties justifying IT investments and so on. By developing and offering courses that would adequately address key aspects of enterprise analysis IS faculty would contribute to solving the most serious and persistent issues in IS practice. Notably, most enterprise analysis tasks require good understanding of one or more business areas, including accounting, finance, strategy and management, as well as of the fundamentals of business processes and structure. Therefore, business schools' faculty is in a unique position to offer such courses.

Separation of requirements planning, management, analysis, communication and solution assessment and verification into a separate course could also prove rather beneficial. For example, in traditional SA&D courses, the subject of requirements elicitation is usually covered in one lecture/week which limits the learning to presenting students with descriptions of different elicitation techniques and bulleted lists of strengths and weaknesses of each of these techniques. If, instead, this topic occupied a larger portion of the semester, hands-on exercises and assignments focusing on specific techniques, such as conducting a focus group, could be designed and incorporated in the curriculum. Offering courses which focus exclusively on business analysis may not only help improve critical business analysis skills of IS graduates, but also help business IS programs to differentiate themselves from more technically minded and design-oriented computer science programs.

Offering specialized courses focusing on specific aspects of business analysis may require trade-offs in terms of other courses, perhaps related to development environments and other more technical issues. Other benefits and costs of such trade-offs need to be seriously considered by individual programs. A potentially useful approach to thinking about such trade-offs is to consider specific career paths for which students can be best prepared at IS programs at business schools. In their discussion of the Revised Model IS curriculum, Topi and his colleagues (2007) outline 17 career paths related to Information Systems. Some of these career paths, e.g. Database Administrator, Network Administrator or Application Developer, require highly specialized technical skills and relatively little business knowledge; therefore they may be best suitable for graduates of computer science programs. Some other careers, such as Business Process Analyst or ERP specialist demand good knowledge of business functional areas, and, therefore, represent a natural niche for IS programs in business schools. Focusing on a few selected career paths² would allow IS programs to incorporate more in-depth knowledge related to the selected career paths into IS curriculum, thus increasing future competitiveness of the program's graduates. Other issues that need to be taken into account when implementing changes in the IS curriculum include course offering by other IT-related programs at the same institution, local job market and the nature of the student population, competences of IS faculty, etc.

CONCLUSION

In the environment of falling enrollments in technology areas and increasing competition in the area of IT education, IS programs in business schools need to differentiate themselves from other programs, such as computer science and information science and technology schools. The ongoing professionalization of business analysis championed by the IIBA offers a unique differentiation opportunity for business IS departments. Such differentiation can be achieved by stronger focus on business analysis issues, which are now only superficially covered in the IS curriculum. This paper examined the extent to which business analysis is covered in traditional IS curriculum, identified the gaps between such curriculum and the IIBA-recommended *BA BoK*. It further offered some suggestions for short-term and long-term steps to close such gaps. A notable limitation of the discussion presented here is that it is focused primarily on undergraduate programs and did not consider coverage of BA issues in graduate IS curriculum. Similarly, the analysis focused on the model IS curriculum and mainstream textbooks and did not examine to what extent BA is actually taught at different business schools. These represent useful directions for future research. In addition, more work needs to be done to develop specific approaches to incorporating

² The suggested focus does not imply higher emphasis on learning specific technologies, which may be considered on-the-job IS knowledge; rather it would involve offering students a broad, if necessary, multi-disciplinary perspective on issues related to a selected career path.

BA topics in business IS curriculum. With this regard the experience of schools that have already introduced courses with a stronger business analysis focus, such as business process analysis and enterprise architecture needs to be studied.

REFERENCES

1. Agarwal, R., and Lukas, H.C. (2005) The Information Systems Identity Crisis: Focusing on High-Visibility and High-Impact Research, *MIS Quarterly*, 29, 3, 381-398.
2. Benbasat, I., and Zmud, R. W. (2003) "The Identity Crisis within the IS Discipline: Defining and Communicating the Discipline's Core Properties," *MIS Quarterly* 27, 2, 183-194.
3. Firth, David; Lawrence, Cameron; and Looney, Clayton Arlen (2008) Addressing the IS Enrollment Crisis: A 12-step Program to Bring about Change through the Introductory IS Course, *The Communications of the Association for Information Systems*: 23, Article 2, 17-36.
4. Gorgone, John; Davis, Gordon B.; Valacich, Joseph S.; Topi, Heikki; Feinstein, David L.; and Longenecker, Herbert E. (2003) IS 2002 Model Curriculum and Guidelines for Undergraduate Degree Programs in Information Systems, *The Communications of the Association for Information Systems*, 11, Article 1, 1-99.
5. Gorgone, J.T., Gray, P., Stohr, E. A., Valacich, J.S. and Wigand, R. T., (2006) Model Curriculum and Guidelines for Graduate Degree Programs in Information Systems, *The Communications of the Association for Information Systems*, 17, Article 1, 1-75.
6. Gorgone, John; Gray, Paul; Stohr, Edward A.; Wigand, Rolf T.; and Valacich, Joseph S. (2005) MSIS 2006 Curriculum Preview, *The Communications of the Association for Information Systems*, 15, Article 30, 544-554
7. Granger, Mary J.; Dick, Geoffrey; Luftman, Jerry; Van Slyke, Craig; and Watson, Richard T. (2007) Information Systems Enrollments: Can They Be Increased? *The Communications of the Association for Information Systems*: 20, Article 41, 649-659.
8. Hoffer, J. A., George J. F., and Valacich J. S., (2008) *Modern Systems Analysis and Design*, 5th edition, Prentice Hall.
9. International Institute of Business Analysis (2009) About the IIBA, IIBA Web Site, Available at: <http://www.theiiba.org/>
10. International Institute of Business Analysis (2006) *A Guide to the Business Analysis Body of Knowledge*, Release 1.6 Available at: <http://www.theiiba.org/>
11. Luftman, Jerry; Kempaiah, Rajkumar (2007) An Update on Business-IT Alignment: 'A Line' Has Been Drawn, *MIS Quarterly Executive*. 6, 3, 165-177.
12. Luftman, Jerry; Kempaiah, Rajkumar (2008) Key Issues for IT Executives 2007, *MIS Quarterly Executive*, 7, 2, 99-112.
13. Robey, D. (2003) Identity, Legitimacy and the Dominant Research Paradigm: An Alternative Prescription for the IS Discipline. A Response to Benbasat and Zmud's Call for Returning to the IT Artifact, *Journal of the Association for Information Systems* 4, 7, 352-359.
14. Ross, J. W., Weill, P., & Robertson, D. (2006). *Enterprise architecture as strategy creating a foundation for business execution*, Harvard Business School Press.
15. Satzinger, John W.; Batra, Dinesh; and Topi, Heikki (2007) Analysis and Design in the IS Curriculum: Taking it to the Next Level, *The Communications of the Association for Information Systems*, 20, Article 31, 483-496.
16. Topi, Heikki; Valacich, Joseph S.; Kaiser, Kate; Nunamaker, Jr., Jay F.; Sipiior, Janice; de Vreede, Gert Jan; and Wright, Ryan T. (2007) Revising the IS Model Curriculum: Rethinking the Approach and the Process, *The Communications of the Association for Information Systems*, 20, Article 45, 728-240.