Finance Futuring Panel, June 13, 2018

KENTUCKY DEPARTMENT OF EDUCATION FINANCE FUTURING PANEL REPORT

FINANCE FUTURING PANEL, JUNE 13, 2018



Contents

Project Overview	3
Trends	∠
Trend Categories	∠
Top Trends	5
Other Trends	8
Business Ethics/Ethical Leadership	10
Panel Recommendations for Business Administration Core Skills and Knowledge	11
Recommended Changes and Comments to Current Instructional Areas in Business Core (Skills Needed by All People in Business)	11
Recommended Additions to Instructional Areas in Business Core	13
Proposed Innovation Management and Customer Experience Management Standards	14
Cluster Core Recommendations	15
Finance Pathways	18
Pathways Recommendations	18
Emerging Job Titles	19
Job Titles Losing Popularity	19
Credentials and Certifications	20
Observations and Recommendations	22
Futuring Panel Participants	24
Special Guests	25
Appendix A—Proposed Innovation Management and Customer Experience Management Standards	26

Project Overview

On June 13, 2018, the Kentucky Department of Education partnered with MBA Research and Curriculum Center to convene a Finance Futuring Panel with executives from the finance industry from across the Bluegrass state. The executives provided their perspectives on:

- Trends shaping the workforce development needs in the Kentucky business environment and some of the skillsets needed to address those trends
- Skills needed by all business professionals
- Skills needed specifically in the Finance cluster
- Business ethics scenarios in business and finance industry workplaces
- Credentials and certifications within the finance industry

The Finance panel was represented by executives in each of the following pathways:

- Accounting
- Banking Services
- Corporate Finance
- Insurance
- Securities and Investments

Trends

Panelists were asked to identify trends that are affecting or changing the way they do business or how they plan for the future. Group facilitators stressed the importance of identifying trends evident in the finance industry. We encouraged executives to think about trends from a business perspective rather than from an educational/teaching perspective. Participants were given five general trend categories to think about as they identified trends.

Trend Categories

Technological: The direct and indirect impact of technology on any aspect of business from strategy, to operations, to tactics

Cultural: The major elements of culture including material culture, language, aesthetics, education, religion, attitudes, values, and social organization

Environmental: Any forces that impact how businesses interact with the environment and use their natural resources (e.g., fresh water, air, living organisms, metal ores, oil, most forms of energy)

Global/Political: The impact of a political ideology (e.g., capitalism, socialism, communism), nationalism, stability, and international relations on business

Governance: Factors that impact the principles and standards that govern business decision-making and business oversight. Governance refers to all processes and decisions that seek to define actions, grant power, and verify performance.

Regulatory/Legal: The full breadth of laws, rules, and regulations that businesses are subjected to by governing bodies whether through civil or common code, domestic or international law, or governmental entities, agencies, or jurisdictions

Top Trends

The following trends were identified as top trends by panel participants:

1. Increase in automated transactions

As transactions become more automated, panelists discussed how to balance the many benefits of automation with the continued need for face-to-face interactions. The rise of FinTech (Financial Technology) means new technologies and innovations are competing with or replacing traditional transactions and communications.

Key comments from panelists about this trend:

- By 2020, 40% of transactions will be automated.
- Staffing is challenging based on need for both automation and face-to-face encounters.
- More automated transactions are contributing to a decrease in communication skills among employees.
- Technology and automation contribute to a rapid pace of change.
- Need to continue to make room for other types of transactions—not just automated
- Automation is increasing utilization and dependency.
- More information is stored in the cloud, which increases security issues.

Skills needed by workers to address this trend as identified by panelists:

- Change management/Adaptability
- Judgment/Accountability
- Analytics
- Flexible communication
- Increased security risk awareness (not just a blind faith in technology)
- Critical thinking

Top Trends (cont'd)

2. Decrease in effective workplace communication skills

As technology and automation take hold, Futuring panelists lamented that workers' written and verbal communication skills are not being honed and not always utilized appropriately in the workplace.

Key comments from panelists about this trend as identified by panelists:

- Reliance on technology is contributing to a decrease in communication skills based on fewer face-to-face transactions.
- We need to make sure workers have opportunities to communicate with employees and customers in real-time to continue to strengthen communication skills.
- Some employees may need remedial help with communication skillsets.

Skills needed by workers to address this trend as identified by panelists:

- Soft skills
- Verbal/Written presence
- Interpersonal communication/Relationships
- Cultural fluency/Intelligence
- Collaboration/Team work
- Change management/Adaptability

3. Accelerated pace of mergers and acquisitions leading to more rapid globalization and difficulty navigating the complex regulatory environments

Mergers and acquisitions, among other things, are bringing people from opposite ends of the world together in the working environment. While companies are scaling up, they are also challenged to navigate tangled webs of regulation, often in more than one locale or country.

Skills needed by workers to address this trend as identified by panelists:

- Project management skills
- Negotiation skills
- Sales skills—ability to influence people
- Multilingual communication skills
- Emotional intelligence
- Collaboration/Team work
- Cultural fluency/Intelligence
- Understanding tariff changes

Top Trends (cont'd)

- Ability to react, adapt, and learn on the job
- Risk identification and understanding
- Core business knowledge
- Ability to think innovatively
- Ability to identify opportunities
- Critical thinking skills
- Understanding wire transfers, exchange rates, and foreign investment concepts
- Understanding of compliance and audit processes
- Continuous reconciliation processes
- Understanding of cybersecurity risks
- Awareness of global economics, global crisis, and issues around national debt

4. Increased diversity in the workplace

As globalization continues, employees and customers alike are encountering and working with people who are very different from themselves. Panelists indicated the importance of making sure workers are prepared to be culturally flexible and ready to understand various topics from global points of view. The financial industry is working to diversify its workforce in order to respond to a global customer base.

Key comments from panelists about this trend:

- Need for diversity in leadership roles
- Need to provide diversity of work models—in office, remote, shared work spaces, etc.
- Many employees are speaking out in favor of more diverse work cultures

Skills needed by workers to address this trend as identified by panelists:

- Core business knowledge
- Finance curriculum throughout K-12
- Soft skills
- Understanding of diversity from a number of viewpoints including culturally and religiously

Other Trends

- Increasing options for customer communication—Customers can choose communication mediums and preferences such as mail, email, text, voicemail, etc. These preferences can be tracked and maintained in sophisticated CRM programs.
- Decrease in students choosing professions in the finance pathways—Panelists felt that
 maybe students are not being given enough information to make informed career
 choices. The Bureau of Labor Statistics reported that there were 334,000 financial
 services jobs open in the U.S. in the spring of 2017, but only a third of those were filled.
 The finance industry is struggling to attract and retain millennial workers in many of its
 sectors.
- Increased use of technology with risks to privacy and security—Panelists indicated the need for stronger vigilance around issues of security risks including fraudulent emails and identify theft.
- Changing regulatory environment—There is some deregulation occurring and it's important that workers understand the history behind the shifts including the positive and negative consequences.
- Increase in workers with specialized skills vs. generalist knowledge of financial industry—This phenomenon leads to workers lacking broad-based perspectives and critical thinking skills necessary for success within the financial industry.
- The evolution of cryptocurrency—While this trend is still early and much information is lacking, the panelists were concerned about possible disruptions to the federal reserve and the inflation rate.
- The rise of FinTech (Financial Technology)—New technologies and innovations that are competing with, or replacing traditional financial methods and transactions
- Fewer brick-and-mortar financial institutions—More than 1,700 bank branches in the U.S. closed between July 1, 2016 and June 30, 2017. Large metropolitan areas, suburbs, and small towns are all losing branches.
- More co-locations (colos)—More companies are choosing to rent climate controlled, physically secure spaces for their servers and other computing hardware.
- Increase in compliance officers due to more complex regulations—61% of financial firms (globally) are expected to increase spending on compliance officers in 2018, although could see these numbers decrease as deregulation continues to take a stronger hold.

Other Trends (cont'd)

- Increase in continuous auditing processes—Continuous auditing can provide real-time or near-real-time information and can enhance and shorten the cycle of traditional auditing methods. Many businesses are seeing the benefits of continuous auditing, even as the technology behind it and implementation methods continue to evolve.
- Increased need for math and analytical skills—Panelists saw a need for more workers to understand how data has been derived and how to use that data to change business operations. Panelists felt a greater emphasis needs to be placed on the foundations of algebra and quantitative analysis skills.
- Increasing need for employees to navigate software systems—Employees need
 increased software know-how and companies need to have help-desks readily available
 for customers who run into trouble. End users need to be aware of how to identify
 security issues. Employees need to be proficient in understanding and navigating cloudbased solutions.
- Increased need for project management skills—Project management definitions varied among this group of panelists, but all agreed that workers need a greater understanding of how to make a project flow from beginning to end on both small and large scales.
- Increased outsourcing—While the "gig" economy is here to stay, panelists were concerned that many contract workers don't have the knowledge to be held accountable on a larger scale for their work, which can undermine the industry.
- Rapid growth of blockchain technology—Panelists indicated that this emerging
 technology will have a major impact on every industry. Beyond cryptocurrency,
 blockchain platforms can provide communal recordkeeping systems without a central
 authority. Blockchain technology is predicted to improve efficiencies in areas such as
 recording payments, loans, trade finance, and supply chain transactions. Compliance
 measures will evolve as the technology is further implemented and utilized.
- Increased emphasis on workplace culture, and a redefinition of loyalty from both the employer and employee perspectives—The remote workforce and the "gig" economy both play a role in this trend. The drive for employees to enjoy a meaningful and fulfilling culture at work is also a factor.

Business Ethics/Ethical Leadership

MBA Research and Curriculum Center and the <u>Daniels Fund</u> have formed a partnership to promote the teaching and learning of business ethics at the high school level. As part of our research to help strengthen our curricula and instructional materials in the business ethics realm, we asked Kentucky Finance panelists to talk about dilemmas they have encountered or learned about in their industries.

Ethical Dilemmas in Finance

- Insider trading
- Lack of transparency related to fees
- "Cooking" the books
- Nondisclosure of information
- Lack of dual-accountability
- Confidentiality breaches
- Lower level employees pressured to make decisions beyond their employee level
- Discriminatory lending practices
- Operating without understanding of policies
- Greater loyalty to company rather than customers
- Lack of integrity in product recommendations
- Company cultures promoting fraud
- Lack of willingness to take responsibility for mistakes
- Inappropriate use of social media tools at work
- Lack of understanding or guidance about what is right and wrong, or working through "gray" areas

Panel Recommendations for Business Administration Core Skills and Knowledge

Panelists were asked to analyze current general business topics (i.e., Business Administration Core instructional areas) and react to them, sharing insights on current topics as well as adding to or deleting from the list based on what they want workers to know and understand. The following table represents a summary of the feedback from the finance executives.

Recommended Changes and Comments to Current Instructional Areas in Business Core (Skills Needed by All People in Business)

, , ,	·
Instructional Areas (Topics) and Descriptions	Recommended Changes and Comments
Business Law: Understand business's responsibility to know, abide by, and enforce laws and regulations that affect business operations and transactions	Emphasized the importance of regulatory compliance—some in the group wondered if regulatory compliance should be its own topic area based on the growing complexity of regulations today.
Communications: Understand and apply the concepts, strategies, and systems used to obtain and convey ideas and information	Workers need to be able to collaborate and work as a team, give and receive feedback, give and receive coaching, and have "crucial conversations"
Customer Relations: Understand and apply the techniques and strategies used to foster positive, ongoing relationships with customers	Potentially distinguish between external and internal customer? Change name to Stakeholder Relations ?
Economics: Understand the economic principles and concepts fundamental to business operations (e.g., profit, loss, competition, economic resources, opportunity costs, business models, economic systems, impact of government, cost/profit relationships, economic indicators, global trade)	No comments or suggestions
Emotional Intelligence: Understand and apply techniques, strategies, and systems used to foster self-understanding and enhance relationships with others	No comments or suggestions

Recommended Changes and Comments to Current Instructional Areas in Business Core (Skills Needed by All People in Business) [cont'd]

Instructional Areas (Topics) and Descriptions	Recommended Changes and Comments
Entrepreneurship: Understand and implement the concepts, processes, and skills associated with identifying new ideas, opportunities, and methods, and with creating or starting a new project or venture	No comments or suggestions
Financial Analysis: Understand tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources	No comments or suggestions
Human Resources Management: Understand and use the tools, techniques, and systems that businesses implement to plan, staff, lead, and organize its human resources	No comments or suggestions
Information Management: Understand and apply tools, strategies, and systems needed to access, process, maintain, evaluate, and disseminate information to assist business decision-making (includes computer applications, business records, acquiring information to guide decision-making, data mining, and analysis)	No comments or suggestions
Marketing: Understand the tools, techniques, and systems that businesses use to create exchanges and satisfy organizational objectives	No comments or suggestions
Operations: Understand and implement the processes and systems needed to monitor, plan, and control the day-to-day activities required for continued business functioning (e.g., purchasing basics, inventory basics, nature of supply chain, basic project management, safety and security, nature of production, nature of quality control, expense control)	No comments or suggestions

Recommended Changes and Comments to Current Instructional Areas in Business Core (Skills Needed by All People in Business) [cont'd]

Instructional Areas (Topics) and Descriptions	Recommended Changes and Comments
Professional Development: Understand concepts,	Workers need to understand their own
tools, and strategies used to explore, obtain, and	organizational style early on in their
develop in a business career (e.g., job-seeking skills,	careers.
time management, goals setting, chain of command,	
decision-making and problem solving, career	
advancement activities)	
Strategic Management: Understand tools, techniques, and systems that affect a business's ability to plan, control, and organize an organization/department (e.g., nature of management, business plans, company goals/objectives, mission, SWOT analysis, KPIs, action plans, analysis of results, risk management)	No comments or suggestions

Recommended Additions to Instructional Areas in Business Core

In addition to commenting on current Instructional Areas, panelists were also asked to recommend additions. Suggestions for additional instructional areas or topics were:

- Regulatory Compliance
- Social Media Management
- Personal Finance
- Technology
- Sales
- Project Management

Proposed Innovation Management and Customer Experience Management Standards

Panelists were asked to review and comment on MBA Research and Curriculum Center's proposed standards in Innovation Management and Customer Experience Management (See Appendix A for proposed standards). The proposed standards reflect primary and secondary research efforts to represent the growing emphasis on the two areas.

The group entered into spirited discussions on both topics. Here is an overview of the questions and comments that arose from the discussion:

Innovation Management

- Is innovation a skill that can be taught?
- How do you increase innovation?
- What does innovation really mean?
- We all hear, "Oh, you have to be innovative." Innovation will happen out of necessity.
- Need to make sure change management methodology is included
- Everyone needs to know the business model for both entrepreneurship and marketing.
- The standards need to be linked with cultivating a culture of risk taking, thinking outside the box, and the ability to do cost/benefit analysis for decision management.

Customer Experience Management

- It is important to understand how your customers perceive your business.
- Customer service is an intangible product.
- Businesses should constantly be seeking customer feedback.
- Some group members felt that the Customer Experience Management piece should be tied in with the Customer Relations topic area in the Business Administration Core.
- Workers should be taught how to establish a relationship with customers.
- The number one reason one changes their business relationship is because of a bad experience, but sometimes an individual will leave to follow an employee who transitioned to another company because of the relationship.
- Experience is macro, individual encounter is micro.

Cluster Core Recommendations

Finance Panel participants were asked to provide feedback on skillsets needed specifically in their Finance Cluster Core. Areas in red below denote their input and comments.

Standards and Skillsets Applicable to the Entire Finance Industry

Instructional Area: Business Law

Standard 1. Understands business's responsibility to know, abide by, and enforce laws and regulations that affect business operations and transactions

- Understand government regulations pertaining to the finance industry to protect the company wellbeing
- Acquire a foundational knowledge of compliance to understand its nature and scope
- Develop a compliance program to protect the company well-being
 - This should be a compliance-related role—not a finance-related role.
 Finance would provide input.
 - o Change the word *develop* above to *understand* or *utilize*

Instructional Area: Customer Relations

Standard 2. Understands the techniques and strategies used to foster positive, ongoing relationships with customers

- Understand characteristics, motivations, and behaviors of clients in finance to facilitate client interaction
- Utilize technology to facilitate customer relationship management

Instructional Area: Financial Analysis

Standard 3. Understands tools, strategies, and systems used to maintain, monitor, control, and plan the use of financial resources

- Analyze financial needs and goals to determine financial requirements
- Understand financial markets to recognize their importance in business
- Manage financial resources to ensure solvency
- Explore the fundamentals of valuation to make appropriate financial decisions for the company
- Use debt and equity capital to raise funds for business growth
 - Suggested change: Understanding the use of debt and equity capital
- Understand the fundamentals of managerial accounting to aid in financial decision-making

Cluster Core Recommendations (cont'd)

Instructional Area: Information Management

Standard 4. Understands tools, strategies, and systems needed to access, process, maintain, evaluate, and disseminate information to assist business decision-making Suggested change: Understand the utilization of technology tools...

 Utilize information-technology tools to manage and perform work responsibilities

Instructional Area: Professional Development

Suggested change to title: Financial Professional Development

Standard 5. Understands concepts, tools, and strategies used to explore, obtain, and develop in a business career

- Participate in career planning to enhance job-success potential
- Utilize career-advancement activities to enhance professional development
 - Need to specify—finance related careers
- Acquire knowledge of corporate governance to be aware of the restraints imposed upon finance functions
 - Comment—not sure of meaning. Is this about understanding the checks and balances within the company? Or about the regulatory side?
 Potential change to: Acquire knowledge to understand the roles and responsibility of financial services.
 - General suggestions: Need to reference career paths; need a reference to fiscal policy; need to reference understanding different roles within finance

General suggestions for Professional Development

- Students need help understanding career pathways and certifications since there are so many and they are so varied
- Continuing education needs to be addressed in Professional Development

Cluster Core Recommendations (cont'd)

Instructional Area: Financial-Information Management

Standard 6. Understands tools, strategies, and systems needed to access, process, maintain, evaluate, and disseminate financial information to assist business decision-making

- Acquire foundational knowledge of financial-information management to understand its scope and nature
- Utilize financial information technology tools to manage financial information and perform work responsibilities
- Acquire foundational knowledge of financial information analysis to aid in financial decision-making
 - Group wasn't sure why this was separate from general Information Management

Instructional Area: Risk Management

Standard 7. Understands risk-management strategies and techniques used to minimize business loss

Need more encompassing wording describing "business loss"

Suggested change: Understands risk management strategies and techniques

- Acquire a foundational understanding of risk management to demonstrate knowledge of its nature and scope
- Explore risk control to understand its relationship to risk management
- Manage risk to protect a business's well-being
 - Suggested change: Manage risk to protect a client's and business's wellbeing
 - O Question: Does this need its own section?

General comments—need to cover:

- The importance of high level of attention to detail and accuracy
- Understanding the Federal Reserve
- Reference continuing education and credentials
- Workers need to understand the Federal Reserve

Finance Pathways

Participants were asked to review the pathways and descriptions for each cluster within their industry and share feedback around the relevance of the Finance pathways. They were also asked to share feedback on job titles and career options the Finance cluster. The five pathways which include: **Accounting, Banking Services, Corporate Finance, Insurance, Securities and Investments.** Participant comments are noted in red.

Pathway Recommendations

Accounting encompasses careers that record, classify, summarize, analyze, and communicate a business's financial information/business transactions for use in management decision-making. Accounting includes such activities as bookkeeping, systems design, analysis, and interpretation of accounting information.

Banking Services are primarily concerned with accepting deposits, lending funds, and extending credit. They include cash management, short-term investments, mortgages and other loans, credit cards, and bill payment. Banking services are delivered via a number of different institutions, from commercial banks (the largest group) and other traditional means (savings and loans associations, credit unions, and local banks) to newer ventures through insurance companies, brokerage houses, and the Internet.

The **Corporate Finance** function in a company manages policy and strategy for (and the implementation of) capital structure, budgeting, acquisition and investment, financial modeling and planning, funding, dividends, and taxation.

The **Insurance** industry exists to protect individuals and businesses from financial losses, delivering "products" that transfer risk from an individual or business to an insurance company.

Securities and Investments: The investments industry consists of brokerage firms, investment banks, and stock exchanges, all of which support the flow of funds from investors to companies and institutions. Related services include financial planning, asset management, hedge fund management, and custody services.

- Investment banks may fit better under Corporate Finance
- Include financial services companies within Securities and Investments
- Question: What about personal, corporate, and wealth management?

Areas that the group felt should be included in pathway definitions were:

- Community development financing
- Nonprofit financing
- Capital markets

Pathway Recommendations (cont'd)

Suggestions for potential additional pathways were:

Regulation and compliance—the group felt there were a number of job titles and career
options that would fall under here which would include careers within regulatory
bodies.

Emerging Job Titles

The group identified the following emerging fields or job titles within the finance industry:

- Accounting advisory services—consulting role and outsourcing CFO for hire. Companies
 are doing this to help scale up as they expand into emerging markets.
- Banking services
- Registered investment advisor
- Investment consultant
- Registered investment advisor (RIA)—this job is 95% finance and 5% psychology

Job Titles Losing Popularity

Book keepers

Credentials and Certifications

Credentials and certifications play a large role in some industries. MBA Research asked Kentucky Finance panelists to share information about which credentials are important in their industries. Here is how they responded:

- 80% indicated that certifications/credentials were necessary in their field. Each pathway was represented in this area.
- 20% (two in Securities and Investments and one in Corporate Finance) indicated that certifications/credentials were NOT necessary in their fields. Securities and Investments and Corporate Finance were represented by these answers. All three of these respondents indicated that credentials/certifications were valued.
- 95% of the respondents indicated that their organizations formally supported employees obtaining credentials/certifications. Most of those indicated that the certifications/credentials were necessary to either get their job, keep their job, or advance to the next level of employment.

The following certifications and certificates were listed as being important in the financial industry with potential benefits being increased stature, pay, and responsibility:

- Accredited in Business Valuation (ABV)
- American Bankers Association (ABA) Certificate in Business and Commercial Lending
- Certified Financial Planner (CFP)
- Certified Government Financial Manager
- Certified in Financial Forensics (CFF)
- Certified Public Accountant (CPA)
- Certified Senior Bank Examiner (CSBE)
- Chartered Financial Analyst (CFA)
- Chartered Global Management Accountant (CGMA)
- Client Accounting Advisory Services Certificate
- Credit Union Compliance Expert (CUCE)
- Employee Benefit Plan (EBP) Audit Certificate
- Financial Industry Regulatory Authority Certifications, Series 6
- Financial Industry Regulatory Authority Certifications, Series 65
- Financial Industry Regulatory Authority Certifications, Series 66
- Financial Industry Regulatory Authority Certifications, Series 7
- Financial Industry Regulatory Authority Certifications, Series 82

Credentials and Certifications (cont'd)

- Life and Health Insurance License
- OMEGA
- Personal Financial Specialist (PFS)
- Project Management Professional (PMP)
- QuickBooks Pro Advisor
- Single Audit Certificate
- Six Sigma Certification
- Health Insurance Associate (HIA)
- Chartered Property Casualty Underwriter (CPCU)
- Certified Internal Auditor (CIA)
- Certified Information Systems Auditor (CISA)

Observations and Recommendations

Based on feedback from Futuring panelists, MBA Research and Curriculum Center recommends that the Kentucky Department of Education, Division of College and Career Readiness, support teachers and students in the following ways:

- Provide teachers with tools and resources, including continuing education, to help them
 understand the vast implications and applications of artificial intelligence and
 automation so that they can begin to process their impact on the world of work and
 help students do the same.
- Encourage teachers to utilize available resources to incorporate business ethics learning
 opportunities into their classrooms, especially as they relate to the use of artificial
 intelligence. Grappling with these issues in the classroom will help prepare students to
 more effectively deal with ethical dilemmas in the workplace. Encourage teachers to
 engage with business and industry to help students develop an understanding of realworld ethical dilemmas in business.
- Support teachers with tools and opportunities to help them increase business engagement encounters within their classrooms and in the form of real-world learning experiences for students such as mentorships, work-site tours, and career exploration. Encourage teachers to network with business and industry in their local areas through formal or informal gatherings and even a brief externship to a key business within their area. Many of the panelists present on June 13th were there because of their dedication to education and would likely be willing to engage further with teachers and students in their districts. MBA Research can help facilitate connections between teachers and Futuring panel members at your request.
- Provide teachers with resources and ideas to help them emphasize globalization. Offer teachers opportunities to learn about and connect with Kentucky-based businesses that have a global reach to help them understand the effects of globalism on their locale.
- Help teachers identify tools designed to strengthen students' capacities to be "at home" in diverse work settings. Developing a classroom that promotes and embraces cultural diversity is a good start.
- Make career development resources accessible and encourage teachers to incorporate
 them into their classrooms. Specifically, have teachers verse students in potential
 certification/credential options as they weigh steps for the future. These resources
 should highlight career pathways in each industry and provide students with
 opportunities to experience various jobs first-hand as they explore career choices.

Observations and Recommendations (cont'd)

- Evaluate curriculum as it relates to the panelists' comments on the importance of
 quantitative analysis. Make sure teachers have a mastery of this subject area and
 recommend that they help emphasize the importance of this area to students,
 administrators, and counselors. In the classroom, teachers can highlight the many ways
 quantitative analysis lays a foundation for skillsets in the business/finance career
 pathways.
- Promote the use of project-based learning (PBL) in classrooms across the state. PBL
 helps students learn to navigate teamwork settings, continue to strengthen
 employability skills, develop project management skills, and can also help create a
 culture of innovation, all of which can lay the groundwork for success in the workplace.

Futuring Panel Participants

A total of 19 individuals from the finance industry in Kentucky attended the June 13th panel. Most of the participants indicated they were interested in continuing to learn more about CTE and stay connected to Finance education in Kentucky. Participants were:

Tom Anonson Class Act Federal Credit Union

Brent Boden BB&T

Chris Brady Meridian Wealth Management

Lisa DeVaughn Foley Baldwin CPAs

Jim Eveslage Areva Pharmaceuticals

Cliff Fowler Fowler Durham & Co.

Gene Grabowski PNC

Derek Hetherington The Bankers' Bank of Kentucky

Nikki Jackson Federal Reserve Bank of St. Louis—Louisville Branch

Jessica Klein Humana

Ross Kline Advanced Financial Solutions Group

Tamuna Loladze Bluegrass International Fund

John Markle Private equity Management

Kevin Newton Commonwealth of Kentucky, Dept. for Community Based Services

Lydia Powell Kentucky Employees Credit Union

Dwight Salsbury Ross, Sinclaire & Associates

Darlene Zibart Kentucky Society of CPAs

Special Guests

- Thank you to Jodi Adams, Sherri Craig, and Connie Witt with the Division of College and Career Readiness for their diligent notetaking.
- Janet Marlene Ratliff, Associate Professor of Management/Entrepreneurship and Center Director of the Center for Economic Education, observed our panel at the invitation of Betty Montgomery with the Kentucky Department of Education.

Marlene made a brief presentation to the group regarding financial literacy and the passing of Kentucky House Bill 132, which is an unfunded mandate for the teaching of a financial literacy course (now required for graduation) at the high school level.

Marlene introduced the newly formed Coalition for Financial Literacy in the Commonwealth.

Appendix A—Proposed Innovation Management and Customer Experience Management Standards

Instructional Area: Innovation Management (VM)

Standard: Understand the strategies and techniques used in the creation of a new process or product.

Performance Element: Utilize critical-thinking skills to determine best options/outcomes.

Performance Indicators:

- Explain the need for innovation skills (PD:126, LAP-PD-018) (CS)
- Make decisions (PD:017, LAP-PD-010) (CS)
- Demonstrate problem-solving skills (PD:077, LAP-PD-017) (CS)
- Demonstrate appropriate creativity (PD:012) (SP)

Performance Element: Implement strategies to develop new ideas for business growth.

Performance Indicators:

- Describe types of business innovation (radical change to products, radical change to processes, incremental improvement to products, incremental improvement to processes) (SP)
- Explain factors affecting innovation strategies (SP)
- Recognize opportunities/issues (SP)
- Generate ideas (associating, questioning, observing, experimenting, networking) (SP)
- Test ideas to ensure solution requirements are met (SP)
- Develop network to share ideas (SP)
- Create culture to foster innovation (MN)

Performance Element: Adapt to and manage change within an organization.

Performance Indicators:

- Describe relationship among innovation, learning, and change (SM:094) (CS)
- Explain the nature of change management (SM:095) (SP)
- Explain the change-management lifecycle (SM:096) (SP)

Appendix A (cont'd)

Performance Element: Understand the role and function of innovation management.

Performance Indicators:

- Discuss the nature of innovation management (SP)
- Describe the role of ethics in innovation management (SP)
- Explain the use of technology in innovation management (SP)
- Describe tools used for innovation management (MN)

Instructional Area: Customer Experience Management (CE)

Standard: Understand the strategies and techniques used to create customer-centric experiences.

Performance Element: Implement strategies to develop new ideas for business growth.

Performance Indicators:

- Understand the nature and scope of customer experience management
- Explain the nature of customer experience management (SP)
- Discuss customer experience models (e.g., Kano, Systems Logic Model, Total Experience Design, etc.) (SP)
- Describe ethical considerations in customer experience management (SP)
- Explain legal considerations in customer experience management (SP)
- Describe the use of technology in customer experience management (SP)

Performance Element: Transform customer experiences to increase customer satisfaction, sales, and profitability.

Performance Indicators:

- Define overarching ideas that represent the brand (SP)
- Explain the nature of customer experience mapping (e.g., factors to consider—context, factors mattering most, models of customer journey mapping, etc.) (SP)
- Identify customer journeys to understand how customers engage with brand on digital and in physical channels (SP)
- Apply behavioral psychology principles of sequence, segments, and control to improve customer-experience journey (MN)
- Correlate steps in customer journey to attainment of specific business goals (MN)

Appendix A (cont'd)

- Develop vision for ideal customer experience (MN)
- Create customer experience initiative road map (MN)
- Select metrics and initiative objectives (MN)
- Quantify the value of the customer experience (MN)

Performance Element: Improve customer-experience journeys to increase customer satisfaction, sales, and profitability.

Performance Indicators:

- Determine reasons for customer churn (SP)
- Identify customer experience improvement opportunities (SP)
- Determine and fix root-cause issues with the customer-experience journeys (MN)
- Implement change-management principles (MN)