DISCOVERING AND DEVELOPING THINKING STYLES
IN BUSINESS STUDENTS

by

Introduction

Just as different vocational fields require proficiencies in different academic disciplines, so do they require unique intellectual proficiencies or thinking styles. For example, success in some fields requires that individuals apply rules or critique arguments and procedures, whereas success in others demands that individuals draft new rules or imagine arguments and operating procedures. Thus, while 2 individuals may possess the same content knowledge and level of intelligence, the preferred thinking style of one may better suit her to a particular type of job, i.e., one that is consistent with her thinking style. Consequently, it is important for educators to both hone the thinking styles exemplified in certain fields and to value them in our instruction and assessment methodologies.

As noted below, the legislative – or creative – thinking style is among the most critical to business leaders and upper management success. Consequently, 193 business students were studied to determine their preferred thinking style: Specifically, whether business students exhibited the legislative thinking style.

Results suggest that, not only, do students not prefer the legislative style, but that they favor its very opposite. After considering reasons for and ramifications of this apparent stylistic disconnect between thinking style and future career, it is proposed that instructors reconfigure course elements and assessments to develop in students the legislative thinking style. A number of models and examples translating traditional and/or executive assessments to legislative ones are included to ease instructors into this process. Indeed, as is apparent from the examples provided, broadening one’s instructional repertoire to include a focus on legislative thinking is relatively simple and enhances the educational outcomes of all students.

Thinking Style

Many theories and definitions of thinking styles and preferences abound. Some are grounded in physiological differences of the brain, others are personality-based, and still others focus on the reinforcement of preferences toward instruction. Though all delineate styles differently, all agree that a thinking style or preference is the way in which individuals absorb, interpret, and evaluate information.

Whether learned or innate, style does not correlate with level of intelligence or ability. Rather, it reflects a propensity or preference to use, conceive of, or express information in certain ways. Thus, one may enjoy creating, but find that the fruits of her efforts are not very good, i.e., the “painter” who loves easel and brush, but whose paintings fail to rival those of a blind 4 year old; the “singer” who does not seem as inspired by the Sirens as by a cat in heat.

Nevertheless, though such preferences are not correlated with intelligence, they are influenced, synergistically or detrimentally, by environment. Where a person must perform tasks or think in ways consistent with their style, they will excel; where that person must work against or outside of style, the tasks may appear more challenging, and their ultimate level of performance diminished. For instance, some ways of thinking or manipulating information are valued more highly in schools and business than others. Where an employee’s stylistic preference matches the tasks for which she is responsible or role in which she inhabits, she will perform those tasks more easily or more consistently with expectations; Where a student’s stylistic preference matches the way in which she is taught and the way in which she is assessed, she will both learn material and perform her understanding of that materially more easily (or more consistent with the expectations of the instructor). A match between stylistic preference and required performance
will typically lead to the most favorable (highest level of performance). Conversely, where there exists a mismatch, performance will suffer. Therefore, the result, as impacted by thinking style, may sometimes be confused with intelligence or ability.

In academia, thinking styles are relevant to a student’s response to instruction and performance on assessment criteria. A positive correlation between thinking style and assessment style or between thinking style and teaching style will beget a more positive assessment or higher grade. Simply, where a learner is taught in a way consistent with her learning style, she will avoid hurdles erected as a result of translating out of a non-preferred style and into her own, but, rather, will learn in the best possible environment. Where that learner is assessed in a way consistent with her style, she will have the best opportunity to perform to the best of her ability. Accordingly, differential academic success may result in part from different ways of thinking and learning or differing levels of intelligence (however defined). Where success is influenced by the former variable, learning style theory is implicated. Unfortunately, “little research has been done on preferences for knowledge acquisition environments.” Establishing a better understanding of learning and testing pretences is important in designing methods of instruction and evaluation.

Sternberg’s Stylistic Types

One of the most renowned learning style theorists is Robert Sternberg. Blending his expertise in psychology with that in educational theory, Sternberg proposes a broadened notion of intelligence. This triarchic theory of mental self-government accounts for different methods of thinking and learning. Central to Sternberg’s triarchic theory is its proposition that there are three ways or styles of organizing one’s thinking: an executive style, a legislative style, and a judicial style. This theory is particularly helpful in understanding how business students learn and later translate knowledge to the workplace.

The executive thinking style favors the application of existing facts and theories. Executive thinkers like to follow rules and address pre-fabricated, pre-structured problems. They are far more comfortable filling a gap within an existing structure than creating that structure. As students, executive thinkers prefer (and do best on) multiple choice, short answer, and fill-in-the-blank tests that call for learned facts. They excel in jobs where they enforce rules or apply or implement the ideas of others, such as police officers, builders of others’ designs, and administrative assistants.

The antithesis of the executive style is the legislative style. The legislative thinking style is a creative one, filled with individuals who like to design problems, formulate hypotheses, and develop new ideas. These thinkers prefer to decide for themselves what to do and how to do it, rather than plugging facts into someone else’s model. They prefer designing, innovating, and inventing, and enjoy being entrepreneurs and creating new business systems. While the individuals may find few opportunities to display their talents in traditional educational settings, they are often among the brightest graduate students, where their creativity is in demand. Legislative thinkers prefer occupations that permit creativity, such as scientists, artists, architects, and investment bankers. The legislative thinker, however, will often find resistance in the K-12 and college setting. Such scholastic settings do not reward this style, but, instead, its exact opposite.

The third style is the judicial thinking style. The judicial style is an evaluative, comparative one. Judicial individuals prefer evaluating rules or procedures, comparing and contrasting ideas and outcomes, and judging people or their work. Common jobs for judicial thinkers include troubleshooter, critic, consultant, and systems analyst.

Translating Styles to Achievement in the Academy and in Business

Generally, the executive style is the one most highly valued in higher education. Students sit through fact-oriented lectures, are rewarded for their ability to memorize, and are assessed through multiple choice and short answer/ fill-in-the-blank tests. The primacy of the executive style is both reinforced and exemplified by the majority of Instructor’s Guides and
Manuals that place a premium on this form of assessment: pages of multiple choice, true/false, and fill-in-the-blank questions; few highlight critical thinking questions. Less common are courses or assessments favoring legislative and judicial styles such as those including practica, portfolios, projects, and exams requiring creative thinking, creation of hypotheses, or critique of issues.

Consequently, students who prefer the executive style often enjoy benefits in college instruction. First, because these students learn in classrooms that match their style, they experience the best possible learning environment. This gives them an edge in learning. Second, because the methods of assessment match their stylistic preference, these students also have an advantage in performing on such assessments\textsuperscript{xxxi} -- they are asked to demonstrate their knowledge in a format with which they are most comfortable. In contrast, students preferring the judicial and legislative styles neither obtain instruction consistent with their stylistic leanings nor enjoy quite the same opportunity to display their competencies. As a result, learning style may account for differential academic success\textsuperscript{xxxvii} where “intelligence” is equal. It may produce false positives (good grades) for traditionally-styled but less gifted learners who appear to be more intellectually-gifted or more conversant with the material studied when, in fact, they excel due to match of assessment and thinking styles. Conversely, it might produce false negatives for non-executive students who might, in fact, possess superior knowledge, but be somewhat disabled by the assessment scheme.\textsuperscript{xxviii} They are never provided with a forum in which to demonstrate their knowledge.

The Thinking Style of Managers and Entrepreneurs

Although thinking styles are relevant in vocational as well as educational venue, the success of a style in one setting does not portend its success in another.\textsuperscript{xxxi} This is particularly true with regard to the school-work transition: The executive style valued highly in college is not usually the one that helps graduates succeed in the managerial workplace.\textsuperscript{xli} Rather, it is often irrelevant if not contrary to upper managerial positions\textsuperscript{xlii} that require degrees of freethinking, creativity, and intellectual flexibility. Thus, while low-level managers who must do what they are told and implement other people’s ideas are often executive,\textsuperscript{xlii} those who ascend the managerial ladder must exemplify the legislative\textsuperscript{xliii} style.\textsuperscript{xliv}

Recent scholarship confirms the predominance of the legislative style in the world of business management.\textsuperscript{xlv} Creativity\textsuperscript{xlvi} and the ability to conceptualize new strategies, operating procedures, and innovations are frequently cited among the most important characteristics for success in upper management.\textsuperscript{xlvii} A 1993 survey of managerial competencies ranked innovation second to only to communication ability as the most critical managerial skill\textsuperscript{xlviii} and a 1997 Ernst and Young survey\textsuperscript{xlix} ranked it in the top 10 characteristics of successful entrepreneurs.\textsuperscript{l}

Ideas and innovation are clearly the gold standard in management, “the most precious currency in the new economy,”\textsuperscript{li} a key in the new millennium.\textsuperscript{li} Only with innovation and creativity can organizations “improve the quality of their outputs, revitalize mature businesses, enter new markets, react to competitive encroachment, try out new technologies, . . . , and develop alternative applications for existing product categories . . . .”\textsuperscript{liii} Only through imagination can businesses and entrepreneurs\textsuperscript{lv} develop new products, and processes,\textsuperscript{lv} and delivery mechanisms.\textsuperscript{lv} Only through creativity can an organizations maintain a “sustainable advantage in the marketplace.”\textsuperscript{lvii} Indeed, obtaining a competitive advantage is no longer a function of how well a company plays by the existing rules, but of its ability to radically change those rules.\textsuperscript{lviii} Without such creative thinking, a business is condemned to obsolescence.\textsuperscript{lx}

This is particularly true in the technology\textsuperscript{lx} and e-commerce sectors where steady stream of innovations is necessary for survival.\textsuperscript{lx} Indeed, a survey of CEOs of 669 firms around the globe disclosed the belief that technological innovation is the very key to their competitive advantage.\textsuperscript{lxii} Furthermore, beyond the invention of new technologies is the conceptualization of new rules to manage those technologies and their attendant risks. “Technology brings into play a wide variety of legal topics in unique and innovative settings,”\textsuperscript{sxxi} and many of the legal rules remain subject to debate. As the legal trends tend to emerge from methods employed in or arising from the business sector,\textsuperscript{lvii} managers must be able to “develop and implement effective solutions to legal problems/ risks, and effective strategies to exploit legal opportunities.”\textsuperscript{xxv}
In addition to imagining new items and new methods, business leaders, sometimes, must also critique, compare the relative strengths and weaknesses of competing or existing models of doing business, and evaluate rich potential markets. For example, those leading their companies into markets abroad must be able to create and conceptualize new systems of ownership and contract as well as to devise and critique new rules.

_Translating Characteristics of Business Management Success Into Thinking Styles_

As shown in Table 1 below, creativity and related attributes translate primarily to Sternberg’s legislative style. A distant second, but also related to success was the ability to assess, critique, and compare/contrast competing options. This speaks to Sternberg’s judicial style.

**TABLE 1**

<table>
<thead>
<tr>
<th>Managerial Attribute</th>
<th>Sternberg Style Reflected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation, envisioning</td>
<td>LEGISLATIVE</td>
</tr>
<tr>
<td>Creativity</td>
<td>LEGISLATIVE</td>
</tr>
<tr>
<td>Revision, revise operating methods</td>
<td>LEGISLATIVE, JUDICIAL</td>
</tr>
<tr>
<td>Develop plans and ideas, imagining</td>
<td>LEGISLATIVE</td>
</tr>
<tr>
<td>Critique, assess</td>
<td>JUDICIAL</td>
</tr>
</tbody>
</table>

_Is Contemporary Business Education Meeting Its Goals?_

Unfortunately, institutions of higher education do not commonly focus on instilling students with these legislative stylistic abilities. In fact, in recent years, the business sector has questioned whether business students are adequately educated to enter the business world. Corporate leaders have asserted a widening gap between practice, academic research, and teaching. To some extent, this may reflect the disconnect between a valuation and assessment strategy in college that favors the executive style and the demands of the middle-to-upper managerial workplace that rely on the legislative or judicial ones.

Yet, to realize the goals of higher education, instruction should not only provide students with content knowledge, but also develop them intellectually. Thus, with regard to business students, responsible instruction should seek to develop the thinking styles and skills valued in their future careers, i.e., management/business administration.

It is possible that business students, having self-selected this field, already exhibit legislative leanings. If so, then, as instructors, we need only to ensure that we reward this preference and not allow it to lie dormant. If, however, students are not legislative, then our approach to instruction may differ, as we more aggressively seek to develop these styles. To intelligently design such instruction, however, we must first have some knowledge of the learning styles of our students. Therefore, to help provide that necessary background, a study was conducted to determine whether business students exhibited the “managerial” legislative style, and if not, what style they exhibited.

**THE STUDENT STUDY**

193 students at a private business college were studied over 4 consecutive semesters (2 academic years). Students were mainly sophomores in a Legal Environment of Business course within their core curriculum – all were business majors. They ranged in age from 17 – 24 (mean age = 19.8; modal age = 19), and 86 were women while 107 were men.

Students took a modified version of the Sternberg-Wagner Self-Assessment Inventory on the Style (attached as Appendix I) and evaluated it according to Sternberg’s standards for College Student Adults.
After responding to the Inventory, but unaware of its categories, students tabulated their results, and returned both (Inventories and Results) for review. Each student was then labeled as executive, legislative, judicial, or all/no thinking style preference. As Sternberg’s Inventory allows for a high preference in all styles (as well as lack of preference for any style), students who did not exhibit an obvious preference for any style or (or style) (n = 12) responded to a second inventory (attached as Appendix II) designed to ensure that “no preference” students were accurately assessed. Where students again demonstrated high preferences on more than one style or a low preference on all styles, they were deemed no preference. The results were then recorded and tabulated (see Table 2).

Results

As shown in Table 2, the overwhelming majority (72%) of students displayed a preference for the executive style. In contrast, a mere 8% preferred the legislative style. Indeed, it was the least popular style.

<table>
<thead>
<tr>
<th>STYLE</th>
<th>TOTAL</th>
<th>PROPORTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive</td>
<td>139</td>
<td>72%</td>
</tr>
<tr>
<td>Judicial</td>
<td>28</td>
<td>14.5%</td>
</tr>
<tr>
<td>Legislative</td>
<td>16</td>
<td>8.3%</td>
</tr>
<tr>
<td>No Preference</td>
<td>10</td>
<td>5%</td>
</tr>
<tr>
<td>Total students</td>
<td>193</td>
<td></td>
</tr>
<tr>
<td>Total w/ Preference</td>
<td>183</td>
<td></td>
</tr>
</tbody>
</table>

Though not the focus of the instant study, Table 3 shows these preferences are also maintained across gender. Female respondents represented a much larger proportion of judicial and no preference styles.

<table>
<thead>
<tr>
<th>STYLE</th>
<th>FEMALE</th>
<th>MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive</td>
<td>56 (65%)</td>
<td>83 (77.6%)</td>
</tr>
<tr>
<td>Judicial</td>
<td>16 (18.6%)</td>
<td>12 (11%)</td>
</tr>
<tr>
<td>Legislative</td>
<td>16 (18.6%)</td>
<td>10 (9%)</td>
</tr>
<tr>
<td>No Preference</td>
<td>8 (9%)</td>
<td>2 (1.9%)</td>
</tr>
<tr>
<td>Total students</td>
<td>86</td>
<td>107</td>
</tr>
<tr>
<td>Total w/ Preference</td>
<td>78</td>
<td>105</td>
</tr>
</tbody>
</table>

Discussion

Primacy of The Executive Style

The prominence of the executive style among the students studied may be due to a number of reasons. First, college students as a whole might possess an innate propensity toward the executive style. Since traditional K-12 education and standardized tests, such as the SAT and ACT, favor this style, a greater proportion of these individuals have risen through the ranks of
secondary education and into higher education. Hence, colleges contain more executive students than students of alternative styles.

Similarly, business students specifically, the unique group studied here, may contain a higher than average percentage of executive-style thinkers than students in other disciplines. These students have self-selected business education (or the educational institution from which they were drawn), hence, the results merely reflect this selection characteristic. This, however, seems at odds with business/management literature describing successful managers and entrepreneurs as “creative.”

Of course, it may not be that these students possess a natural propensity toward executive thinking, but that they have adapted their thinking style to that demanded by college. Essentially, the high percentage of executive thinkers is due to the educational adaptation of business students: Because teachers teach and tests test using the executive style, students acclimate as much as possible to this style in order to succeed. Students who innately prefer other styles (as well as those who prefer the executive style) have honed their executive style tendencies in response to instructional and assessment techniques, while suppressing their dominant legislative or judicial preferences. Thus, the executive preference might result from a proficiency in that style in response to educational and testing methods.

Ramifications of Style Inconsistency

Whether the executive preference is pre-existing or promoted through instructional techniques, it is, nevertheless, the antithesis of the legislative thinking style associated with managerial accomplishment. This incongruity has many ramifications. First, students without legislative proficiencies will not be adequately prepared for the challenges of management and may face hurdles to excelling in the field. They may find it difficult to suggest innovations and find themselves stalled at the lower levels where the executive style predominates. Second, students unable to demonstrate legislative abilities at the screening or selection stage may experience difficulty entering their chosen field. Indeed, organizations have recently reported that many potential hires did not possess the required skills and experience to receive offers.

Third, to the extent that grades reflect success in executive thinking, they will fail to reflect superior legislative attributes of other students, i.e., those who may possess the best managerial styles. Consequently, stylistically-consistent legislative students may be denied initial opportunities while their less stylistically-compatible counterparts receive them. This disconnect may further suspicions of business that college business curricula are improperly drawn, bringing higher education under increasing public scrutiny.

The Role Of Educators

The real power of educational research lies in its application to the classroom. The results of the instant study suggest that, while legislative thinking is important to managers, students are lacking in this style. Simply, though content coverage may be adequate, courses may not teach what students need to do in terms of developing thinking skills and intellectual leanings.

Instructors relying wholly on executive-focused methods do a disservice to students as well as the business community. As individuals move into upper management, the “capacity for analytical investigation and for responsible action in a social setting” is critical, and the mere possession of a content knowledge base is insufficient for success. While the popular multiple choice or short answer test may offer tradition and ease in grading (particularly in days where institutions of higher education see greater profits if all the seats are filled), they do not measure or develop the legislative style. As students become more and more accustomed to only this type of assessment, their intellectual skill in working within (flexing their) or expressing knowledge through other styles will atrophy. That atrophy would not be important, but for the fact that the neglected style is fundamental for success in management.

Although not every student has the ability to be a great manager, even with ability, she still needs the opportunity of training and development. One may be born with the gifted hands for playing violin, but that gift will remain unrealized if she never touches the instrument.
That individual’s full potential will not be realized unless she has the opportunity and training.\textsuperscript{lxxxvii} As applied here, some students may prefer a legislative thinking, but have repressed that tendency in order to better compete in educational venue. Where existent, these leanings should be encouraged and strengthened. Some students, however, may possess no legislative proficiency. Nevertheless, recognizing that this thinking style is important for their later success, if not vocational survival, the stylistic absence should be remediated.

\textit{Incorporating Stylistic Training Into Instruction and Assessment}

Central to Sternberg’s thesis is that style (indeed, preference) is not an immutable characteristic, but that it can be taught. Consequently, educators should take this philosophy to heart, and endeavor to teach legislative (and, to a lesser degree, judicial) style.\textsuperscript{lxxxviii} This can be accomplished largely by amending or adopting instructional methodologies\textsuperscript{lixxix} that better develop legislative thinking styles,\textsuperscript{xc} and, conversely, de-emphasize the executive style of thinking.\textsuperscript{xci}

Not only can instructors restructure their instruction and assessment to better value different styles, but they can also develop chosen styles.\textsuperscript{xcii} Both help students excel, but in different ways. The former, ensuring that teaching or assessment style matches student style, helps students excel, because they are placed in the best possible learning environment – one that explains and uses concepts in the preferred language of the student – with the best possible assessment style – again, one that allows the student to speak or respond in her preferred language. The latter, teaching a particular style, helps students excel by developing styles other than their preferred one, thus expanding the student’s stylistics repertoire. Indeed, studies have shown that a classroom that encourages creativity is a critical factor in developing creative thinking in students.\textsuperscript{xciii}

This does not mean foregoing content coverage in favor of new age, “every answer is equally valid” philosophies. Creativity or the legislative thinking style is not an end in itself, yet it is crucial to nearly all aspects of business.\textsuperscript{xciv} Rather, developing and valuing the legislative style means reinterpreting projects in terms of legislative (or judicial) styles or adding them to the mix of executive assessments.

Thus, describing or translating factual knowledge to legislative voice, therefore does not displace factual competencies, but continues to demand an adequate factual background while relating that knowledge in a practical way. Arguably, by delivering and debating key concepts within the specific stylistic framework, instructors can increase the likelihood that students will be able to apply (and remember) this information once outside of the classroom and in the boardroom. “A great deal of research on knowledge acquisition has found that mismatches between knowledge and task application lead to reduced performance.” In fact, accounting researchers have found that mismatch between knowledge structure and task application reduces the performance of auditors in a variety of situations.\textsuperscript{xcv} This is a win/win proposition: “Developing “[m]ore creative educational environment[] will provide more valuable human capital to prospective employers through better preparation of students for their membership in organizations.”\textsuperscript{xcvi}

There are 2 primary ways in which an instructor can incorporate or increase the focus on legislative and judicial styles. First, she can address style by translating classroom lecture and test questions to the legislative or judicial voice.

Almost any executive question, prompt for discussion, or assignment (or a portion thereof) can be rephrased to read in legislative or judicial voice. As shown in Table 4 below, the instructor, in lectures, can phrase questions differently or, instead of requiring students to respond to multiple-choice tests that require students to identify a fact, ask students to create or imagine a similar scenario also relying on those same, underlying facts.

\textbf{Table 4}
Translating Thinking Styles to Questions, Assignments, and Assessments

<table>
<thead>
<tr>
<th>EXECUTIVE</th>
<th>JUDICIAL</th>
<th>LEGISLATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of prompt</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who said …</td>
<td>Compare and Contrast</td>
<td>Create</td>
</tr>
<tr>
<td>What is the rule</td>
<td>How are these 2 rules different/similar</td>
<td>Draft a rule</td>
</tr>
<tr>
<td>What was the holding</td>
<td>Critique the arguments</td>
<td>How would you …</td>
</tr>
<tr>
<td>What did</td>
<td>Was the court correct</td>
<td>Ideally what could/should …</td>
</tr>
<tr>
<td>How did</td>
<td>Why did …</td>
<td>Design</td>
</tr>
<tr>
<td>Summarize the rule</td>
<td>What caused…</td>
<td>Invent</td>
</tr>
<tr>
<td>Summarize the facts</td>
<td>Evaluate the arguments/the opinion/the law</td>
<td>Imagine the argument</td>
</tr>
<tr>
<td>Describe…</td>
<td>What was assumed by…</td>
<td></td>
</tr>
</tbody>
</table>

For example, an instructor may wish to assess a student’s understanding and application of a federal (employment) discrimination law as well as its state counterpart. Rather than posing only or primarily factual questions – “When was it passed?” “What categories does it protect?” “How does it apply to this scenario?” – the instructor would lead discussion through legislative (or judicial) prompts. Thus, she would ask students to describe the differences between the federal and state laws, while identifying which portions of the two existing Acts are replicated, rejected, and why. She might ask students to consider the how the 2 laws would apply to a single hypothetical situation, and to argue which law and outcome is superior and why. These would develop the judicial style. The instructor can also ask students to imagine contemporary situations that would fall within or outside of the laws, to consider how the laws might be revised to incorporate new situations, or even to draft a model act. Instructors might even ask students to create (and answer) their own exam questions pertaining to or game focusing on the law studied. These develop the legislative style.

Similarly, students tested for their understanding of international contract law can respond to closed-ended or fill-in-the-blank questions regarding US common law or CISG contracts (executive). Also, they may be asked questions requiring them to compare and contrast (judicial), i.e., requiring students to analyze a contract scenario under either law, to consider differences in remedies, to evaluate those differences, to determine which system of contract law they would prefer and why, and what might have caused the differences. To highlight legislative thinking, instructors can require students to write a contract (within defined guidelines), design a proposal to address a current international contract issue, re-write contract clauses to reflect interests of a defined party, suggest amendments to current legal rules, argue on behalf of a particular issue, or research an issue and design a case-study.

Alternatively, instructors can integrate thinking styles into their overall course organization. This may involve linking certain styles to particular content or themes (or vice versa), or covering all styles sequentially. In either, the focus of instruction is not solely content coverage, but also ways of understanding and styles of thinking. Thus, any course proceeds on 2 planes: 1 of content coverage and 1 of thinking style (intellectual development) that operate at the same time, but address different educational goals. Hence, an instructor would continue to cover the same content, but do so through or while highlighting different thinking styles. In fact, frequently, there is a natural shift in the nature of the subject matter over successive levels of advancement.

Accordingly, courses may proceed cyclically, moving from the fact-intensive executive style to the more abstract legislative one. This has several benefits. By beginning in the executive style, the instructor begins in the style in which students – even students preferring other styles – have become accustomed. Thus, the similarity can provide a comfortable environment. Moreover, the executive style is ideal for teaching facts, rules, and applications of legal rules; the bane of legal instruction. Once this foundation is built, instructors can move students to slightly more sophisticated tasks, such as debating the value of particular laws, critiquing factual or legal situations, and assessing the relative benefits and detriments of different legal rules. This eases students into the judicial thinking style, while keeping one foot in the pre-determined structure.
also shared by the executive style. Furthermore, as it demands that students begin to answer beyond information already provided, it will scaffold them to the legislative tasks. These judicial tasks are ideal for debating the value of particular laws or changes in the law, comparing state with federal statutes (such as discrimination provisions, family and medical leave acts), or statutory with common law systems (such as UCC versus common law contract).

Such organization permits students to obtain foundational knowledge, to broaden their scope, and then to develop their own ideas or applications. In this way, students have the opportunity to experiment with all thinking styles and to excel in them, but also are required to flex styles unfamiliar to them. This benefits executive students by helping to develop legislative and judicial styles and benefits legislative and judicial students by providing the opportunity to further develop and demonstrate these critical proficiencies. Therefore, it is not that substance is short-changed, but revised from being an exclusively executive in delivery and assessment.

*Instructional examples*

Once the thinking styles and their educational construction are understood, it is quite easy to integrate them into teaching. Examples of the lecture (in-class questions) prompts and potential assignments for three different subjects are provided below:

### CONTRACTS

<table>
<thead>
<tr>
<th>EXECUTIVE</th>
<th>JUDICIAL</th>
<th>LEGISLATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>What remedies are available to buyer/seller?</td>
<td>Compare/contrast 2 contracts under UCC vs. common law</td>
<td>Create a contract</td>
</tr>
<tr>
<td>What was the dispositive fact in there being an acceptance?</td>
<td>Are the buyer’s remedies better or worse under common law? under UCC?</td>
<td>Draft a rule regarding acceptance of an e-contracts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How would you argue that this benefits the consumer?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is the argument that this is unfair to the business</td>
</tr>
</tbody>
</table>

### DISPUTE RESOLUTION

<table>
<thead>
<tr>
<th>EXECUTIVE</th>
<th>JUDICIAL</th>
<th>LEGISLATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outline the process of Lemon Law mediation</td>
<td>Compare the state lemon laws of California and New York; which favors the auto manufacturer/dealer?</td>
<td>Imagine a dispute resolution procedure for B2C e-commerce</td>
</tr>
<tr>
<td>Why was the consumer bound by the agreement to arbitrate?</td>
<td>the consumer?</td>
<td>Draft an agreement to arbitrate</td>
</tr>
<tr>
<td>What was the Court’s holding in Waffle House?</td>
<td>What are the relative merits of arbitration as opposed to a trial?</td>
<td>How could you amend the federal trial process to respond to the deficiencies (previously noted)?</td>
</tr>
<tr>
<td>Apply the process of on-line dispute resolution described by Doe to the following factual scenario</td>
<td></td>
<td>Advance an argument on behalf of the plaintiff</td>
</tr>
</tbody>
</table>

### DISCRIMINATION LAW

<table>
<thead>
<tr>
<th>EXECUTIVE</th>
<th>JUDICIAL</th>
<th>LEGISLATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the ADEA?</td>
<td>How does the state Law Against Discrimination differ from/mirror the federal Civil Rights Act?</td>
<td>Craft an argument on behalf of Cheryl Hopwood</td>
</tr>
<tr>
<td>What category is not covered by the 1964 Civil Rights Act?</td>
<td>Compare the extra-territorial application of the Civil Rights Act with the application of the ADEA?</td>
<td>Using Marianne Stanley as a model, author a case study on gender discrimination in college coaching</td>
</tr>
<tr>
<td>Apply the civil rights act to this factual situation</td>
<td>How do the Civil Rights Act and Free</td>
<td>Draft a model code outlawing discrimination on the basis of sexual</td>
</tr>
<tr>
<td>Did the business illegally discriminate against the 39-year-old, overweight</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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9
As explained below, see notes 8 and 21, the legislative style is part of Robert Sternberg’s Tri-Archic Theory of Mental Self-Government. Although learning styles are described in various ways and by various researchers, Sternberg’s model is applied here. According to WEBSTER’S NEW WORLD DICTIONARY, a style is “a distinctive or characteristic manner . . . or method of acting or performing.”

Paula D. Ladd & Ralph Ruby, Jr., Learning Style and Adjustment Issues of International Students, 74 J. EDUC. FOR BUS. 363 (Jul/ Aug 1999). There are also a myriad of instruments to measures these various styles. Id.

See e.g., R. Zenhauseon, Imagery, Cerebral Dominance, and Style of Thinking: A Unified Field Model, 12 BULLETIN OF PSYCHONOMIC SCI. 59 (1978) (asserting hemispheric dominance theory).

Physiological theories were first proposed in the 19th century when it was discovered that damage to the left hemisphere of the brain affected selective brain functions related to learning. SHARON L. SILVERMAN & MARTHA E. CASAZZA, LEARNING AND DEVELOPMENT 44 (2000).

These include the four personality distinctions of extraversion/ introversion, intuitive/ sensing, thinking/ feeling, and perceptive/ judging, proposed by KATHERINE C. BRIGGS & ISABEL B. MYERS, MYERS-BRIGGS TYPE INDICATOR (1977), and the four shadings expressing personality types, as described by DON LOWRY’S, TRUE COLORS (1978) axes.

Personality-centered approaches typically speak of learning “preferences,” rather than learning styles, to denote the malleability of the characteristic. SILVERMAN & CASAZZA, supra note 4, at 192-93.

Additionally, Kolb has proposed a theory of learning styles – ways in which people likely to learn – for use primarily in school settings. Kolb describes 4 basic types: diverging, converging, assimilating, and accommodating. (1974).
Canfield has created a model for not only contemplating different types of learning preferences, but also for determining how the circumstances of instruction can cause these preferences to change over time. ALAN CANFIELD, CANFIELD LEARNING STYLE INVENTORY (1988).

Ladd & Ruby, supra note 3; Canfield has created a model for not only contemplating different types of learning preferences, but also for determining how the circumstances of instruction can cause these preferences to change over time. CANFIELD, supra note 6.


The variety of thinking styles are distinct from the multiplicity of intelligences, i.e., 8 intelligences, HOWARD GARDNER, MULTIPLE INTELLIGENCES: THE THEORY IN PRACTICE (1993), Howard Gardner, A Multiplicity of Intelligences, 9 SCIENTIFIC AMERICAN19, 20-21 (WINTER 1998), or “disciplinary ways of thinking,” that individuals possess to varying degrees, proposed by Gardner, HOWARD GARDNER, THE DISCIPLINED MIND 117-18(2000).

Approaches that believe learning or thinking styles are innate presume that these propensities are resistant to change; those that conceive of styles or “preferences” as learned or environmentally influenced, believe they are less intractable and, therefore, likely to change over time and circumstance. P 47 As this paper applies Sternberg’s theory of learning styles, it accepts the latter theory, but uses “style” and “preference” interchangeably (as does Sternberg).

For a tool that seeks to assess how preferences may change over time, see CANFIELD, supra note 6, at 47.

However intelligence may be defined. For a history of the psychological study of intelligence, see HOWARD GARDNER, INTELLIGENCE: MULTIPLE PERSEPCTIVES (1996) and ROBERT J. STERNBERG, HANDBOOK OF HUMAN INTELLIGENCE (1982).

Of course, to the extent that a particular task requires proficiency in a certain way of thinking or manipulating information, ability may be implicated.

Id. at 11-12 (even where ability is identical, match between style and environment in which that style is expressed is quite important).

Id.

Other approaches to styles or ways of knowing concur that mismatch between the learner’s preferred style of thinking (or way of knowing) and assessment of teaching methodology will commonly result in a poorer performance by the learner. See GARDNER (2000), supra note 8, at 202-06 (discussing inability of a model languages to capture identical aspects of any given concept) and at 209-11 (mismatch between way of knowing or way of teaching and ultimate understanding of component skills).

Moreover, although style may not entirely account for the difference between any two grades, it may account for some portion of that difference. Sternberg (1998), supra note 8, at 65-66.
Here, assessment refers to valuing and determining student learning as evidenced by performance. Assessment, however, also refers to a collection of methodological considerations undergirding the teaching process. For instance, it includes formative evaluation, which allows the instructor to determine whether and how to revise instructional materials, Patricia L. Smith & Tillman J. Ragan, Instructional Design 338 (2nd ed. 1999), and summative evaluation, performed after the instructional tool has been implemented, which collects information to assess the effectiveness of the instructional tool, Michel H. Schwartz, Teaching Law By Design: How Learning Theory and Instructional Design Can Inform and Reform Law Teaching, San Diego L. Rev. 347, 438 (Spring 2001).


See Gardner (1998), supra note 8, at 19 (noting impact of Sternberg’s triarchic theory of intellect).

Sternberg (1997), supra note 8, at 146.


The forms of government mirror the organization of our minds. Sternberg (1997), supra note 8, at 19. These three ways, or styles, correspond to the functions of government. Id.

This evaluation usually takes place within usually pre-existing ideas or within structured environments.

K-12 institutions value the executive style to an even greater extent. Sternberg (1997), supra note 8, at 4-5, 116 (executive style is almost exclusive focus in elementary and secondary educational institutions).

Although these particular approaches to instruction and assessment tend to be passive or instructor-centered, the executive style, itself, is neither passive nor active, but neutral. In fact, the executive style is prominent in many active and student-centered approaches. For instance, collaborative or highly participative exercises where students apply rules or facts to scenarios as well as in-class games (such as College Bowl or Jeopardy-styled contests) are also characteristically executive.
Ferreira White, supra note 32, at 190-92 (describing “lectures, drills, and memorization” as the traditional methods of business education).

Indeed, students are admitted to college, in significant part, on the basis of scores from the executive-styled SAT and ACT tests. Robert J. Sternberg, How Intelligent Is Intelligence Testing?, 19 SCIENTIFIC AMERICAN 13 (Winter 1998) (“for students who wish to go on to college, much of their fate us determined in the three or so hours it takes to complete the Scholastic Aptitude Test (SAT) or the American College Test (ACT)”).

Sternberg (1997), supra note 8, at 17-19 (students with the executive style are given the best opportunity to perform up to their capacity).

Or some portion of that difference.

Eric Hoover, Business Leaders Urge Colleges To Give Less Weight To Standardized Tests In Admissions, THE CHRONICLE OF HIGHER EDUC., April 12, 2001 (business leaders noting that students who do not do well on entrance exams or “on paper” are often successful in business).

Success is most likely when a person’s thinking style matches the type of tasks or intellectual manipulation required by her role. See Dennis W. Organ, The Editor’s Chair: Managers For All Seasons?, 44 BUS. HORIZONS 1, 2 (May/June 2001). For example, the judicial style will serve one well as a critic, who must assess work or art, but will be disabling when that individual is confined to precisely applying pre-determined rules to singular situations.

Indeed, among the models of career success being created by organizational researchers are those focusing on interpersonal attributes. See generally Scott E. Seibert, Maria L. Kraimer, and Robert C. Linden, A Social Capital Theory of Career Success, 44 ACAD. MNGT. J. 219 (Apr. 2001).

Its relevance also greatly diminishes in graduate-level education.

Sternberg (1997), supra note 8, at 22.

And to a lesser extent, the judicial style.

Sternberg (1997), supra note 8, at 22.

Recent articles in business management, see infra notes 46-67, were reviewed. From this literature, traits described as critical to successful upper-level managers and CEOs were recorded. Qualities were then translated into thinking styles (relying on the Sternberg categories). Although description of a quality as essential was most influential, the repetition of certain qualities was also important as it demonstrated widespread agreement that a particular trait or style was vital.

Creativity has been defined as producing, conceptualizing, or developing novel and useful ideas, processes, or procedures. Christine E. Shalley, Lucy L. Gilson, Terry C. Blum, Matching Creativity Requirements And The Work Environment: Effects On Satisfaction And Intentions To Leave, 43 ACAD. MNGT. J. 215, 215-16 (Apr. 2000).

According to The Harvard Business Review, the “Top 5” wish list of any CEO is “more ideas - better ideas.” Andrew Hargadon and Robert I. Sutton, Building an Innovation Factory, HARV. BUS. REV. 157 (May-June 2000); Michaela Driver, Fostering Creativity In Business Education: Developing Creative Classroom Environments To Provide Students With Critical Workplace Competencies, 77 J. EDUC. FOR BUS. 28-29 (Sep/ Oct 2001) (“Creativity has been identified as a critical dimension in making organizations successful today”); cf. Matthias Bellman & Robert Schaffer, Freeing Managers To Innovate, 79 HARV. BUS. REV. 32, 32-33 (June 2001) (large organizations that stymie the creativity of managers will not survive in the global economy).

Of course, creativity need not be confined to the upper echelon of management. Managers should also foster creativity in their employees. Shalley et al., supra note 46; George A. Nation, III and Matthew Melone, For The Introductory Business Law Course Consider An In-Depth Study Of Contract Law In An Integrated Business Context, 17 J. LEGAL STUD. EDUC. 283, 286 (1999) (one must hire and identify innovative people at all levels of management).

William L. Shanklin, Creatively Manage For Creative Destruction, 43 BUS. HORIZONS 29 (Dec/Jan 2000).

Although there is a body of research suggesting that “entrepreneurs” are commonly teams rather than individuals, Michael D. Ensley & James W. Carland, Investigating the Existence of the Lead Entrepreneur, 38 J. SMALL BUS. MNGT. 59, 59-60 (Oct. 2000), this article uses the term as an adjective, describing a behavior or characteristic, whether exemplified by an individual or group.

Jill Conner, Developing the Global Leaders of Tomorrow, 39 HUM. RES. MNGT. 147, 149-50 (Summer/ Fall 2000).

Ulijn, et al., supra note 53, at 294 (entrepreneurs must develop new ways of delivering old products).

Driver, supra note 47 at; This is fundamentally creative undertaking. Vijay Govindarajan & Anil K. Gupta, Strategic Innovation: A Conceptual Roadmap, 44 BUS. HORIZONS 3 (Jul/Aug 2000).

Adapting to “changing competition, markets, and technologies, product innovation is not a fad. It is a necessity.” Id.; Rita Gunther McGrath, Exploratory Learning, Innovative Capacity, and Managerial Oversight, 44 ACAD. MNGT. J. 118 (Feb. 2001) (“To survive in Schumpetarian environments, organizations must be able to cope with increasing complexity and high velocity change”); Michael M. Lombardo, Robert W. Eichinger, High Potentials as High Learners, 39 HUM. RES. MNGT. 321 (Winter 2000) (it is critical for organizations to identity managers who are facile in dealing with change).

The Journal of Management called creativity the most critical “source of competitive advantage,” and noted that to survive, an organization must be able to create and revise accepted ways of thinking and doing. Cameron M. Ford & Dennis A. Gioia, Factors Influencing Creativity in the Domain of Managerial Decision-Making, 26 J. MNGT. 705 (2000).

Shanklin, supra note 51, at 29; Driver, supra note 47 (creativity is essential for a business’s long-term survival).

Globalization has initiated profound changes in the ways that managers lead. Id. at 118-19. Global leadership includes imagining and valuing competing contingencies. Id. at 117-18. It has challenged managers to re-think basic paradigms, and those without
such mastery are struggling. Allen J. Morrison, *Developing Global Leadership Models*, 39 HUM. RES. MGT. (Summer/ Fall 2000).


Little (1997).


ODR, on-line dispute resolution systems, and to a great extent, privacy consortiums, allowing the cross-border transfer and collection of personal information for business and marketing purposes grew out of concerns of and architects of business. Consequently, business has a tremendous potential to impact these areas and develop the future rules.


This is consistent with Sternberg’s supposition that the business manager and entrepreneur would be legislative, and upper level managers are ineffective if strongly executive. Sternberg (1997), *supra* note 8, at 92.

Although businesses should not determine the curriculum of the university, some of their concerns are well-founded inasmuch as they pertain to stylistic development and use of content knowledge in the workplace.

Indeed, because businesses believe that graduates lack the essential qualities to “work,” they are hiring fewer “right out of school for career track positions.” Caster, 2 (1995). Consequently, the college business curriculum has been subject the continuous review and revision of late. Siedel, *supra* note 63 at 717; Dan Bertozzi, Jr., 17 J. LEGAL STUD. EDU. 229 (1999); *see also* Jennifer Reingold, *Corporate America Goes To School*, BUS. WEEK, Oct. 20, 1997.


Although the executive thinking style is the most common in college instruction generally, it is not the most common in every discipline. For instance, art and theatre majors are usually not executive.
Because of their grounding in different, non-American, educational systems, and due to research suggesting that styles may vary according to culture, see Sternberg (Intelligence Testing), supra inote 35 at 16, foreign or “study abroad” students were omitted from the study. Other researchers have noted, however, that international students learn through the lecture methods in their home countries, but arrive in US educational instructions anticipating a different style of teaching. Ladd, supra note 3, at 363, 365.

Additionally, results were returned to students, and Sternberg’s Learning Styles Theory and Inventory explained.

An earlier study including data from some of the same respondents showed that female athletes expressed judicial and legislative styles in a higher percentage than non-athletes. Kimberlianne Podlas, Do Learning Style and Temperament Theories Account For Differential Academic Success Of Student-Athletes? 1 REV. FOR THE STUDY OF COLLEGE TEACHING (Fall 2001).

The disconnect between student thinking style and apparent managerial thinking style reflect an instance where what students belief of career entails is very different from reality.

Clinton O. Longenecker, Barriers and Gateways to Management Cooperation and Teamwork, 43 BUS. HORIZONS 37, 38-39 (Sep/Oct 2000) (discussing how management weaknesses thwart the ability of businesses to move forward).

Too often, businesses do not look to academic research to guide their decision-making and practices. This may be due to the perception that research does not assist in solving practical problems. Sara L. Rynes, Jean M. Bartunek, Richard L. Daft, Across The Great Divide: Knowledge Creation and Transfer Between Practitioners and Academics, 44 ACAD. MNGT. J. 340 (Apr. 2001).

Walter F. Heinecke and Hollylyne Stohl Drier, Research for Better Classroom Practice and Policy, 62 (KAPPA DELTA PI) THE EDUCATIONAL FORUM 273 (1998) (educational research should provide concrete proposals to inform decision-making regarding academic measures and methods).


“Knowing the ‘rules’ or ‘black letter law’ of various business law topics is necessary and important but not sufficient to effectively manage legal issues in a business environment.” Nation and Melone, supra note 36, at 287. Indeed, there is a differences between the “law on the books” and what the public believes is “on the books.” PETER H. ROSSI & RICHARD A. BERK, JUST PUNISHMENTS: FEDERAL GUIDELINES AND PUBLIC VIEWS COMPARED 207 (1997).

See generally, Ferreira White, supra note 32, at 190-96.

Sternberg (1997), supra note 8, at 119.

Indeed, among the Malcolm Baldridge Education Criteria for Performance Excellence Initiative’s 11 core concepts for and values of educational criteria were “understanding that students may learn in many ways” and that focusing on the school-to-work transition was critical. National Institute of Standards and Technology (1998) as reported by Karathanos, supra note 70.
The Baldridge group brought together leaders from prominent businesses, higher education, and organized labor to develop goals and standards for meeting higher educational needs, to host conferences, to disseminate this work, and to experiment with alternative accreditation procedures. Id.


Hence, courses should not focus exclusively on developing creativity. Rather, it should be integrated into courses. See Driver, supra note 47 (“Creativity...should be considered as one of the several dimensions commonly included in mainstream business courses”).

Responsible teaching requires instructors to identify our goals so that we are able to better respond to student needs, adapt our methods to the changing context of the classroom, and determine whether our methods meet our goals. STEPHEN D. BROOKFIELD, BECOMING A CRITICALLY REFLECTIVE TEACHER 29 – 35 (1995).

Barbara J. Allison, Richard Steve Voss, Sean Dryer, Student Classroom and Career Success: The Role of Organizational Citizenship Behavior, 76 J. Educ. For Bus. 282 (May/ Jun 2001) (“A primary goals of business school educators is to prepare students for successful careers in industry” and this includes developing particular skills and behaviors).

Even educators who employ alternative pedagogies in their classrooms or who favor active educational methods may be unsure of which methods are most beneficial to developing business students. Though perhaps well-intentioned, not all alternative pedagogical paths lead to gold. Instead, some continue to reward or reflect the same learning style, but reinvented.

Styles are teachable, and students can be given tasks that force them to utilize any valued style. Sternberg (1997), supra note 8, at 90.

Driver, supra note 47, at 29.

Philips, supra note 17, at 28.

Driver, supra note 47, at 29.

This is adapted from Sternberg (1997), supra note 8, at 121-23.

Even writing can be taught in ways that emphasize different thinking styles. For instance, instructors can require critical-analytical papers (the judicial style), expository papers (executive style), or creative papers (legislative).

Sternberg (1997), supra note 8, at 111. In mathematics or business, lower level jobs typically require executive tasks, solving prestructured problems or implementing someone else’s vision. Higher levels, however, demand more legislative thinking, such as formulating plans, solutions, and theorems. Id. Yet, if non-executive students are screened out at earlier phases, not only will those equipped with the thinking styles to succeed be absent, but only those with styles incompatible with success, i.e., the tasks required for success, will be available. Id. at 12.

College teachers in many disciplines assert that the lecture is the ideal key for learning. They argue that students need background information and facts before they can learn on their own or consider concepts more creatively. CHET MEYERS & THOMAS B. JONES, PROMOTING ACTIVE LEARNING (1993), 13-14.

Id. at 6 (quoting Pat Hutchings).