Enhancing Entrepreneurship Education Through Memletic Learning Theory

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This paper describes the role of Memletic learning style theory in the curriculum design of an undergraduate entrepreneurship course. The seven Memletic categories classify learning propensities based upon the theory of multiple intelligences whereby substructures to individual’s intelligences may be identified, providing insight into behavior and learning preferences. Activities, assignments and teaching strategies in this highly experiential course were designed to address each learning style preference. This paper illustrates a curriculum design strategy that encourages the development of entrepreneurial orientation and behaviors by applying Memletic learning style theory. Detailed class exercises, term projects, and imagination development tools are highlighted.

INTRODUCTION

Educators and theorists in the learning arena have promoted the matching of teaching strategies with student learning preferences to enhance learning processes (Kassab, Al-Shboul, Abu-Hijleh, & Hamdy, 2006; Burrows-Horton & Oakland, 1997). Lively debate regarding the validity and impact of numerous learning style inventories developed through the lens of varied learning classification theories has ensued over the past 25 years.

Learning styles have been defined as filters for individual perceptions of their world (O'Connor, 1997), the manner in which people process information styles (Dececco & Crawford, 1974), the qualities that influence the ability to acquire information and take part in learning experiences Grasha (1996), and the learning material preference (Peirce, 2000). Felder (1996) referenced Carl Jung’s theory of personality types in classifying sixteen learning styles which can be measured by inventories such as the Meyers-Briggs Type Indicator. Kolb (1984, 2000), and Kolb and Kolb (2005) defined learning styles as the process through which people produce concepts and principles which guides their behavior in new situations (Noogabi, 1997). He postulates their learning style has been influenced by experiential learning, as categorized by the following processes: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Kolb’s research provided the framework for widely known learning style indexes (Deed, 2009) including: Dunn and Price Learning Styles Inventory, Kolb’s Learning Styles Inventory, Sternberg’s Thinking Styles Inventory, and the Memletic Learning Style.

We discuss how one of the authors has developed an entrepreneurship course that employs Memletic Learning style theory throughout the curriculum to enhance student engagement and understanding. The remainder of this paper provides a deeper explanation of Memletic Learning Style theory, a review of
entrepreneurship education literature, detailed description of the method by which each Memletic Learning Style has been embedded into the curriculum, and a discussion of the potential impact and significance of the Memletic model. This paper discusses the adoption of Memletic learning theory as a teaching strategy by structuring teaching materials for each style within the context of an undergraduate entrepreneurship course.

LITERATURE REVIEW

Memletic Theory

Empirical evidence suggests that learning styles provide a good predictor for the preferred learning behavior of individuals (Bostrom, Olfman, & Sein, 1993). Learning capabilities are enhanced when students are familiar with their learning style and adopt a process that reflects their orientation (O'Connor, 1997). An understanding of their own learning styles is acquired through experience (Seif, 2001) and through the completion of learning styles inventories which are available on-line or through coursework.

Educators perceive learning styles to be influential factors with varied approaches and materials required to effectively reach individual learners (Anderson & Elloumi, 2004). Golubtchik (2009) asserts that educators and students should engage in a dyadic learning process whereby teachers initiate learning by presenting curriculum through multiple modalities, and that students take control of their learning by employing not only their favored learning modes, but also by experimenting and building competence in less familiar learning modes.

The influential book Frames of Mind (1983) by psychologist Howard Gardner introduced the theory of multiple intelligences by which he defined criteria for intelligence based upon individual biological and psychological potential to solve problems in varied contexts. Seven intellectual capacities were identified: linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, interpersonal, and intrapersonal. His work led to the expansion of the definition of intelligence, and has been adopted by educators as a modality for classifying learning propensities. The Memletics learning theory (Memletics, 2012) identifies learning styles based upon the brain function classifications as developed by Gardner (1983). Most people have one to three prominent styles (Davis, 2007; Shelton, 2009). The styles are as follows:

1. Visual learners benefit from seeing demonstrations, and prefer visual stimuli such as videos, images, and spatial understanding,
2. Aural learners absorb concepts through music and sound, and are typically strong listeners,
3. Verbal learners prefer engagement through words, both in speech and writing,
4. Physical learners prefer whole body movement to facilitate concentration and learn through using their body, hands, and sense of touch,
5. Logical learners prefer reasoning and systems,
6. Social learners prefer group activities and learn through interaction including question and answering,
7. Solitary learners prefer to work alone and use self-study; they structure their efforts and are intrinsically motivated.

A recent empirical study by Shelton (2009) examining the learning styles of students confirmed that there are marked differences in learning style preferences. Results indicated that if students were taught as a group rather than individually, the preferred learning styles became blended, thereby limiting learning opportunities for students. This research raises the question of the potential impact of designing curriculum for group instruction by conveying the material through the entire range of learning styles to facilitate individual learning styles. This would entail structuring the learning experience to reach multiple learning styles, allowing students with one style to absorb the material through one method, and other learners to experience the material in their preferred learning modality.

Scholars have applied the analysis of Memletic learning theory to a wide range of academic disciplines. A study regarding the impact of learning styles within the context of second language programs determined that students with different learning styles displayed significant variance in
capability for four skills, listening, writing, structure, and reading (Moenikia & Zhed-Babelan, 2010). The authors recommend the designing of learning experiences be developed according to the Memletic Learning Styles to enable student success. Learning preferences according to Memletic theory for gender differences, as well as distance versus classroom users (Moeni, Aliapour & Ghaderi, 2009) have also been examined. Findings indicated that students with visual learning style had the greatest academic achievement, and students with logical and physical styles demonstrated the lowest academic grades. A gender difference was identified with males preferring the following styles in order of descending importance: verbal, solitary, social, logical, physical, aural, and visual. Females demonstrated a different order of learning preference: aural, verbal, visual, logical, solitary, physical, and social styles in declining order of preference. While literature pertaining to entrepreneurship education recognizes experiential learning as effective, references pertaining to Memletic Learning Styles and entrepreneurship education were not identified.

Entrepreneurship Education

The importance of entrepreneurship to economic expansion and job creation has long been recognized with government organizations encouraging academic institutions to develop programs to promote entrepreneurial behavior in graduates (European Commission, 2006). The United Nations Conference for Trade and Industry (UNCTAD, 2010) promotes programming that facilitates students acquiring entrepreneurial competencies such as creativity, initiative and persuasion. Enterprise and entrepreneurship education Guidance for UK higher education providers (2012) defines entrepreneurship education as equipping students with the knowledge and capabilities required to set up a new venture, typically demonstrating innovation, ability to transfer knowledge, address intellectual property, and operate in a trans-disciplinary manner.

Entrepreneurship education is fraught with controversy regarding the successfulness of academic versus practitioner approaches (Honig, 2004). Proponents of the ‘real world school of learning’ advocate that entrepreneurship is complex and chaotic requiring creativity and drive, in conjunction with skills and reasoning. Three common approaches to entrepreneurship curriculum design include: entrepreneurial capacity, the process method, and the cognitive method (Neck & Greene, 2011). The entrepreneurial capacity approach was popular in the 1980s and 1990s, and entailed educators structuring the curriculum to expose students to current and historic entrepreneurs, and emphasizing that without innate characteristics the evolution of students into entrepreneurs would not be feasible. Educators employing this approach are not engaged in developing entrepreneurial capability, but rather allowing students to explore their suitability to becoming entrepreneurs by starting a business after they graduate.

The process approach to entrepreneurship education emphasizes skills which are required for stages of venture development and typically includes both skill-building courses and exposure to innovation and product development (McMullan & Long, 1987; Vesper & McMullan, 1988; Plaschka & Welsch, 1990). Business plan writing which entails primary and secondary research skills and cases illustrating business examples form the core teaching methods for this approach. The process approach curriculum is commonly structured with an introductory course, supplemented by classes with an entrepreneurship emphasis regarding opportunity analysis, marketing, finance, growth management and harvesting (Neck & Green, 2011). Process oriented entrepreneurship coursework would typically be more experientially oriented than other business school coursework (Hills, 1998; Calvert 2009), with students conducting primary research, and developing business proposals.

The cognitive approach to entrepreneurship education emerged in the early 1990’s, with widespread adoption occurring during the past few years. This approach focuses on the transformation of the student both in their potential to think entrepreneurially and in the skills and motivation to launch an enterprise. Curriculum for this methodology focuses on students developing the knowledge structures necessary to assess decisions involving opportunity evaluation, creation, and growth (Mitchell, Smith, Seawright, & Morse, 2000). The cognitive method is based upon the premise that entrepreneurs may be developed through structured curriculum that encourages students to observe and interpret the world through a lens which emphasizes opportunity identification. The approach is action oriented, with curriculum including
frequent reflection exercises and a portfolio of techniques to practice entrepreneurship such as games and simulations, reflective practice, and venture start-up. Typically faculty incorporate exercises to promote creativity and idea generation to enhance cognitive capabilities for venture creation.

The study of entrepreneurial learning can be traced to Deakins and Freel’s (1998) paper which considered entrepreneurial learning within the context of small firms. The focus for many researchers emphasizes the development of the individual’s cognitive ability to facilitate moving from a potential entrepreneur to a nascent entrepreneur (Rae, 2000; Erikson, 2003) which may occur at the beginning of a career or after work experience and capital for venture start-up has been acquired (Rae, 2006). Tell (2008), suggests networking activities in conjunction with structured reflection exercises will build both entrepreneurial skills and the social capital necessary to launch ventures. Nahapiet and Ghoshal (1998) discuss the concept of entrepreneurship as both the capability of recognizing opportunities, and having the capability to act upon the opportunity by organizing external resources.

Memletic Theory as the Core Pedagogy in an Entrepreneurship Course

The curriculum in the Idea to Opportunity course is based upon the cognitive approach to entrepreneurship education. Students engage in trend spotting, idea generation, creative problem solving and anti-conventional thinking to expand their knowledge base and identify new venture ideas. Through a process of problem and customer discovery, students ‘get out of the building’ (Blank & Dorf, 2012) to test their ideas on potential customers and experts as they build their concepts from the idea stage to a business opportunity. A network of investors, innovators, and experts provide insights and feedback throughout the process. After teaching the course for several semesters one of the authors adopted Memletic Learning Theory in an effort to reach students, as there was typically a portion of the class who did not evolve in their capabilities as much as other students.

There are usually 25 students in a class, typically in their second or third year of an undergraduate program. The class is comprised of students from a variety of disciplines including business, communications, computer information systems, psychology and anthropology. The course is required for a minor in Entrepreneurship and requires an introductory entrepreneurship course as a prerequisite. Students complete the Memletic Learning Style questionnaire at the beginning of term to become familiar with their preferred learning styles, and also to understand their potential challenges with some learning environments. The types of exercises and the author’s logic in employing various learning style methods are also discussed at the beginning of the term.

Memletic Learning Styles have been employed to facilitate a richer learning environment for the full range of learner categories. Whereas many courses employ pedagogies that speak to one or two learning types, typically visual and social learners, this course has components to appeal to each of the learning styles addressed in Memletic theory. Activities are structured throughout the term so that students will be exposed to at least two key activities or assignments in their preferred style. Projects and events are experiential in nature, but structured in such a manner that students from varied learning styles may mold the experience to ‘fit’ their style. The methods employed to embed the Memletic Learning Styles throughout the course curriculum and the class experiences are provided below (See Table 1), with a detailed explanation of the major events provided in Appendix 1.
TABLE 1
COURSE ACTIVITIES MAPPED TO MEMLETIC LEARNING STYLES

<table>
<thead>
<tr>
<th>Learning Style and Learning Activities</th>
<th>Visual</th>
<th>Aural</th>
<th>Verbal</th>
<th>Physical</th>
<th>Logical</th>
<th>Social</th>
<th>Solitary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frameworks and Worksheets</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Networking and Connecting</td>
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<tr>
<td>Storytelling and Pitching</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Inspiration Logs and Idea Generation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Research and Interviewing</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Expert Panels</td>
<td>X</td>
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<tr>
<td>Website and Blogging</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Play and Music</td>
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</table>

Each course activity is sufficiently flexible to accommodate at least two learning styles. Although one style may be emphasized, students have the opportunity to practice the activity in more than one style in order to enhance their learning. Detailed examples for each style explain the connection between activities and learning styles.

**Visual Learners**

Aside from notes provided to students, visual images are used in exercises and assignments in each class. Visualizations are a powerful tool in the development of creativity capability, and the use of visualization exercises enhances the learning potential for visual learners as well as promoting the development of visual conceptualization for students with alternative learning styles.

- In the first class students are provided with large sheets of paper and colorful pens. They are asked to draw caricatures of themselves and identify their key passions and fascinations. These posters are then hung up around the room for everyone to browse and to reference when forming teams for the day’s activities.

- The Business Model Canvas framework developed by Osterwalder and Pigneur (2009), which provides a visual framework for developing business model alternatives, is printed on large sheets of paper. Students then use sticky notes to collaboratively explore and capture a variety of ideas and hypotheses easily making adjustments as they evolve their concepts. The visual depiction helps students explore a variety of scenarios and allows them to explore a conceptualization process not typically employed in business education.

- Mind Maps are used in the idea generation process. Students break into creativity teams to brainstorm and identify consumer issues or unmet desires and potential solutions. Mind maps are built over the course of several classes with students building upon a single concept, or by exploring multiple concepts. A variety of other idea generation models are also utilized.
Crude prototypes and sketches of offerings are prepared for customer testing, with students approaching potential consumers for feedback. Prototypes are then refined based on potential customer feedback.

**Aural Learners**

Aural learning style students were reached through music as a background to set the tone and encourage creativity in the class. Students with this preference style tend to become more relaxed and willing to participate during classroom interaction, and express appreciation for the positive atmosphere when music is provided as a backdrop to class activity. Empirical studies have confirmed a positive correlation between exposure to varied music and the development of cognitive functioning that are strongly related to auditory information processing (Roden, Grube, Bongard & Kreutz, 2014). A wide range of music is provided, including the use of Binaural Beats and Isochronic Tones, which are purported to encourage brain wave activity that might enhance learning capabilities.

The informality of a class where music is present also signals a break from traditional learning, and reinforces that the class is formative and focused on developing creativity and knowledge processes rather than traditional academic models. Aural learners are often very good listeners and therefore benefit when expert panels and potential customer interviewees provide feedback on their specific venture ideas. When working in teams, verbal learners often do the interviewing with aural learners capturing the thoughts and insights from the interviewees.

**Verbal Learners**

Verbal learners are reached through a range of both writing and speaking during class time through exercises, team projects, blogs, presentations, and multiple reporting methodologies including:

- During the first class students must list their passions, fascinations, and provide a three word self-description as a way to break down barriers, meet, and remember their classmates. Students also post a profile online that is shared with the rest of the class which includes their caricature, as well as ‘A little about me’, ‘an Interesting Tidbit’, and ‘What I can contribute to a team’.
- In the Sweat Box Challenge, students are challenged to pitch their venture concepts to innovators from the community. They pitch several times in an evening to a variety of people and have the opportunity to refine their pitches as the evening progresses. The goal is to engage the audience and obtain ‘investment’ in self, and in their venture concepts. In preparation for this activity, a theater director works with the students on storytelling. They distill their ideas down to six word stories to capture the essence of their ventures, and practice their ability to communicate effectively in a time-pressured environment.
- The final team concept is summarized via a ‘Business Model Canvas’ (Osterwalder et al, 2009) which is presented in class in a 2 minute scrum format to help students identify and communicate the key elements of their process and activities. The verbal engagement of the entire class in providing feedback for each concept is formative, as well as providing an additional experience for verbal learners. The evolution of their concepts is presented in a ten minute Discovery Pitch at the end of the term.
- Traditional power point lectures are sometimes used to communicate foundational concepts.

**Physical Learners**

To accommodate physical learners in the classroom a number of opportunities for movement are incorporated throughout the term and in each class as follows:

- Most classes begin with play. Board games, puzzles, nerf balls, and barrel of monkeys are employed to move students into a relaxed state with a focus on the here and now. Play stimulates curiosity and imagination and is useful for preparing the students to participate in class activities encouraging adaptability and enhancing problem solving capabilities.
• The story telling class with the theatre director incorporates lots of movement and physical interaction among students through role-play and warm-up activities. A pitch coach also works with students on voice projection and modulation, body language and networking strategies.

• A variety of objects are brought into class to spark activity and discussion. Student teams identify a problem, they then choose objects that they play with and examine by considering the function, texture, and movement of the objects. The objects are used to inspire the development of a product that solves the problem.

Logical Learners

For students who prefer reasoning and systems, a series of frameworks and worksheets are offered to help organize their thinking in a logical process. Once students have identified a venture idea, they conduct further primary research to test their business model hypotheses. In order to provide context and a big picture understanding, students are provided with a broad framework and then asked to focus on three or four key elements, with an understanding of the interrelationships of the elements being emphasized.

• Frameworks such as the Business Model Canvas (Osterwalder et al, 2009) and Value Proposition Canvas (Osterwalder et al, 2012) are used to help students track their opportunity development process. Students are required to move through a logical process, providing rationale at each pivot point in their analysis. The focus is on learning and reflecting on a process of problem and customer discovery, with students posting regularly on team blogs to track their process and progress.

• The final requirement of the class is a Discovery Pitch in which teams present their process of discovery and rationale for a final go/no go venture decision to an industry panel.

• Additional frameworks used include mind maps and empathy maps (Osterwalder et al., 2009), which emphasize value creation and problem solving though creative applications.

Social Learning Style

The course strongly supports students with a social learning style. There are many opportunities and requirements for students to learn in groups as well as to network with others when seeking feedback from consumers, panels, teammates, judges, or other students. The goal is to gain a variety of perspectives which could then lead to more innovative venture ideas. Social learning opportunities are provided through:

• Play and learning activities mainly done in small teams. Initially students form creativity teams to assist in idea generation and brainstorming. Once ideas are selected, students self-select new team members for the next stage where they engage in further research regarding customer problems or needs in order to develop final business models.

• The ‘Sweat Box Challenge’ provides social learning opportunities where students interact with community innovators in a networking format learning to make meaningful connections and persuasive pitches.

• Little Black Book assignment – students are required to attend at least two networking events, set goals, begin to develop relationships and capture contact information. This activity stretches students who prefer a more solitary style of learning and encourage students who prefer social interaction to further hone their skills. The Little Black Book is the beginning of a student’s contact base that they will continue to build and nurture throughout the entrepreneurship minor, and ideally, as graduates.

Solitary Learning Style

For solitary learners, creativity often comes from individual effort and reflection. Opportunities for self reflection and individual idea generation have been incorporated into the class through the following:
Students are encouraged to build mind maps outside of class on their own in addition to the maps developed with their creativity teams.

One element of the team blog assignment is individual reflections by each of the team members on their personal learning process. Students are provided with an online survey regarding Memletics Learning Styles so that they can identify their own style. They are then encouraged to expand their learning orientation through full engagement in all of the class exercises, recognizing that many are not structured for their optimal style.

Students are challenged to expand their horizons by identifying a ‘day in their lives’ and then making a plan to undertake new experiences. They develop weekly individual idea logs that capture their activities and the ideas that result from their new way of seeing things.

**IMPACT UPON STUDENT LEARNING**

The primary goal of employing Memletic learning theory has been to reach students through their preferred learning style as well as encouraging them to explore alternative learning styles, thereby facilitating their greater comprehension and enjoyment of the classroom experience and projects. The coursework is constructed to build creativity and capabilities with the range of learning styles allowing easier acceptance of the materials and processes. Many of the class activities are beyond the student’s previous classroom experiences and are developed to move them out of their traditional learning patterns.

The impact of employing Memletic learning theory throughout the course was apparent for some students during the term however, other students have indicated the benefits only became apparent in later classes or post-graduation in the workplace. The range of learning methods were not fully appreciated until the next entrepreneurship class when students are required to further demonstrate their skills and creative capabilities. One of the most evident impacts has been helping more solitary learners develop their social skills, confidence and abilities. For example, connecting and building a broad network of resources is an important part of venture creation. Designing curriculum that requires students to build and practice these skills in a supportive environment may lead to greater retention and learning.

Success has been measured by the author observing visible change in behaviors during the term, with students gaining a visibly greater competency in opportunity identification, idea evolution, networking, enhanced creativity, and personal engagement than in the classes that did not employ Memletic Learning Theory. Further, many students have indicated to the author that they now look at the world differently, they are more open to trying new things, meeting new people, perceiving problems, and to exploring possible solutions. The behaviors adopted by students in the course evolved during the term. Judges participating in multiple events indicated that they had been impressed with the development of confidence and communication skills demonstrated by students during the term. Numerous students advised the author that they were offered jobs or were asked to follow up regarding potential employment upon graduating by event judges.

Feedback provided by students indicates enhanced confidence both in social interactions and idea creation. Students recognize the impact of the exercises; sample comments are provided as follows:

- "Learning different techniques, that came out of the sweatbox challenge about when to exchange information and how to approach networking events has also given me more confidence to go into these events, knowing my business idea and feeling comfortable with creating my own approach to expressing my idea in 30 seconds or less if I need to."
- "I now know that I don't network enough. From now on I have set a goal to go to at least one networking event every month. Networking is key, because of this class I went to three networking events and met some incredible people that were insightful and willing to help. Just by sharing my idea with others has made the proposal stronger, everyone’s perception and experience does help the idea come to reality."

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"Moving forward I want to keep developing my idea-spotting skills and constantly be on the look-out for something that can be sitting right under my nose. I want to think what have I done today, how I can improve on what I did today, and has anything really stood out?"

"My approach to venture development has definitely changed. Before this class, I would have the mindset of thinking I have a great offering in front of me and it is as good as it's going to get, with or without any research. I have also learned a better order to do things in - problem discovery, customer discovery and solution testing, first reality check, create a value proposition, and technical feasibility. I found that these worksheets were very helpful in our process, and I would definitely try to follow a similar process in future venture development."

Students indicated the range and varied nature of the teaching tools, such as the Business Model Canvas and the Empathy Map, were useful as it allowed them to identify gaps or inconsistencies in their business model. They also liked the iterative nature of the exercises as it forced them to hypothesize, test through research and then alter their strategies. Using visual frameworks where students repeat a process adding incremental improvements, then regularly reporting on their findings, then receiving verbal feedback from a broad group of people, provided deeper understanding of the material as well as capability development. The few students who expressed disappointment in the course indicated the lack of structure was difficult for them. The flexibility and ambiguity of some assignments is frustrating for students who are focused on grades rather than on learning the process. The author encourages students who are frustrated during class to consider the reasons for their frustration, and to develop methods by which they can create the structure they feel necessary. The development of coping skills for unstructured situations is core to entrepreneurial thinking; as such providing too much structure defeats the opportunity to facilitate the development of creativity. The authors will continue to explore methods to move the students who are challenged by the process through the materials.

CONCLUSION

The authors suggest that curriculum structured to recognize student learning styles as defined by Memletic Learning Theory enhanced student engagement and facilitated greater understanding of the entrepreneurship skills, processes and materials. Each of the seven types of learning styles was addressed through lesson strategies and the structuring of both physical and virtual environments with multiple opportunities throughout the term for students to engage with the material in their preferred style. While some students expressed frustration with the multiple modes of learning, by the end of the term all of the students demonstrated, albeit at different levels of adaptation, greater creativity and decision-making capacity, and well as the ability to adapt to unstructured and challenging classroom experiences.

The authors note that this experience is limited to one course in an undergraduate university, and that the assessment of impact has been limited to observation and student expressions. A survey is being developed to empirically test the impact of embedding the Memletic Learning Styles in the curriculum on a pre and post course basis. It would also be useful to test the impact in graduate courses, as well as a range of disciplines to verify the significance regarding cognitive development.

REFERENCES


**APPENDIX 1: DETAILED DESCRIPTION OF PROJECTS AND EVENTS**

**Sweat Box Challenge**

Based on development of the mind maps, research and feedback from their creativity team, each student comes up with a new venture concept. Each student creates a 90 second pitch to present at a networking event where innovators from a variety of industries are given “investment dollars” to invest in the top student innovator and the top venture idea. Students mingle throughout the night, pitching their ventures in an effort to gain investment. Students pitch, receive feedback and then have the option to revise their pitches prior to approaching another innovator. Learning comes from receiving feedback and having the opportunity to continually revise and hone their pitches. By the end of the evening, innovators commit their investment dollars to their top candidates. The event typically has 40-50 innovators from the community representing a variety of industries, 10-20 former students, and faculty from across campus. The event runs approximately two hours, and is worth 10% of student’s final grades.

**Team Venture Development Process**

After the Sweat Box Challenge, students form teams and select the ventures they would like to explore. Teams undertake a detailed process of problem discovery, customer discovery, environmental assessment, and technical feasibility to determine the potential of their idea to become a feasible venture opportunity. Each component of the product development process is articulated on a team blog or website. Hypotheses identifying the assumptions students make about their offering, value proposition, customer segments, channels, and potential revenue streams are tested in the marketplace and evolved based on the feedback. By the end of the course students are able to provide rationale for a go/no go decision on their venture idea.
**Discovery Pitch**

The culmination of the team project is a ten minute story pitch to a panel of entrepreneurs and angel investors from the community that traces the evolution of their venture concept. Teams receive detailed feedback regarding their concept, with a focus on the student's discovery process. Although the actual idea is considered by the judges, the majority of the assessment pertains to the process, recognizing that a key deliverable for the course is the development and evolution of both a venture idea and the student mindset, with creativity, process awareness, team capability, and self management identifiable outcomes. Judges evaluate the quality of primary research, and the validity of the student interpretation of research in the evolution of the venture idea. Judges also assess the student’s pitch style, and their ability to respond confidently to questions that demonstrate their knowledge and thoughtfulness around the decision making process.

**Inspiration Logs**

A key outcome of this course is to help students develop new habits of mind, expand their knowledge base and ignite their curiosity and creativity. Building an Inspiration Plan and posting regularly in a log helps students develop the habit of continually scanning the environment, questioning what they see and recognizing potential opportunities. Students are asked to write about “A Day in the Life of…” and then to build a plan for doing different things. They are encouraged to get out of their comfort zone and engage in new physical, social, and mental challenges. Students are required to do at least one new activity every week and reflect on their learning in an Inspiration Log.