USING LEARNING JOURNALS TO ENHANCE ENTREPRENEURSHIP STUDENTS’ REFLECTIVE SKILLS

ABSTRACT

Educational institutions have dramatically increased their emphasis on teaching entrepreneurship. Given that entrepreneurship education is thought to be a key element of venture creation, educators are seeking the best ways to support entrepreneurial learning. Traditionally, there has been too much reliance on subject-centered learning. This paper builds on andragogy that considers a learner-centered learning approach. To do so, we use “learning journals” and the associated reflective skills that students develop to illustrate how students can realize and comprehend the complexity of entrepreneurship. The intended outcome is to identify various attributes and specifics that activate and stimulate students’ reflective skills and mindsets and thereby enhance their learning capacity. We find that entrepreneurship students’ learning can be enhanced by (1) using a learner-centered approach rather than subject-centered; and (2) including reflection in the study process stimulates students’ reflective skills which plays a key role in grasping the complexity of entrepreneurship learnings.

INTRODUCTION

Teaching and learning entrepreneurship has become a priority in many universities today. Educators are thus being charged with finding the best ways to support entrepreneurship education. The challenge in the student learning process is to combine theory with action learning in order to deepen students’ knowledge, and in the process also to enhance the students’ reflective skills. Reflection is a crucial yet frequently neglected aspect of entrepreneurship education. To overcome this problem, we introduced “learning journals” in a graduate-level entrepreneurship course. This paper aims to explore the aspects of how “learning journals” can
assist and enhance student reflection on learning content within the entrepreneurship education process. The journal method has been designed to assist students in the practice of reflective thinking, a process that draws on theoretical knowledge and action-oriented experience to providing ideas for forming and developing entrepreneurial ventures. Reflection is the mechanism whereby a student is able to understand and employ both theoretical and experiential learning in meaningful ways.

Entrepreneurship education is slowly transforming from a focus on management and planning-oriented theories to a more entrepreneurial mindset and creativity-oriented skills. Following some of the theoretical developments in the entrepreneurship field such as effectuation (Sarasvathy, 2001), bootstrapping (Winborg & Landström, 2001), and bricolage (Baker & Nelson, 2005), it has been recognized that entrepreneurship is about doing much with little resources which in turn demands an entrepreneurial mindset (McGrath & MacMillan, 2000) that has novel ways of thinking and acting (Neck & Greene, 2011). In addition, it has been shown that entrepreneurial learning to a great extent develops from previous experiences (e.g., Cope, 2005) and from using what we already know (Neck & Greene, 2011). The challenge for entrepreneurship educators is often to bridge theories and action to create a unique mindset that can offer a better education experience for entrepreneurship students.

Theoretical knowledge often implies a subject-centered education – that is, when students are assumed to know little and teachers are empowered to provide all necessary knowledge, instruction, and guidance. This pedagogical stance is quite contradictory to the notion that entrepreneurs learn from experience. If experience is central for learning, a more appropriate teaching philosophy for entrepreneurship education would be a learner-centered approach that takes advantage of students’ previous experiences and knowledge. Andragogy (Forrest &
Peterson, 2006), in contrast to pedagogy, assumes the learner is an adult with previous experiences and knowledge that should be exploited to create relevant and deeper learning. This approach places the learner, not the teacher, at the center that creates deeper entrepreneurial learning (also including theories).

Using a learner-centered approach, student reflection becomes a centerpiece of entrepreneurship education. Reflection is crucial to develop self-awareness (self-concept) which in turn enhances the self-confidence (Pavlovich, Collins, & Jones, 2009) that is necessary for entrepreneurial self-efficacy (McGee, Peterson, Mueller, & Sequeira, 2009). Self-efficacy is a person’s belief in successfully engaging in a certain activity. Simply put, entrepreneurial self-efficacy is how confident one is in one’s abilities. This belief has been shown to be an important precursor for entrepreneurial intentions that eventually influences such actual entrepreneurial behaviors as business startups. When andragogy serves as the teaching philosophy and reflection is a crucial component for developing entrepreneurial self-efficacy, it is natural to use reflective learning to enhance students’ performative capacity and self-development. Although Raelin (2007) reports increasing use of reflective practices in education, these often refer to clinical practice, corporate education, fine arts studio, etc. In addition, some studies argue that reflection should be included in the education and development of executives and managers (e.g., Mintzberg, 2004; de Déa Roglio & Light, 2009). Despite the fact that reflection has recently been considered important in entrepreneurship education (Neck & Greene, 2011), there has not been much thought about how to actually introduce it into entrepreneurship education (Deakins, 1996; Rae & Carswell, 2000).

The purpose of this paper is to address this teaching gap by introducing a reflective learning process into entrepreneurship education and to discuss how this process might be further
enhanced. Given the focus on reflection, we have selected learning journals (e.g., Moon, 2006) as a vehicle for framing students’ self-reflections on their experience throughout their entrepreneurship courses. These journals allow students to scrutinize their own situation and provide another way of understanding and learning entrepreneurship. We next provide a brief overview of the theoretical framework demonstrating our teaching philosophy that has been used to derive an understanding of the learner-centered approach. After that follows the research method, in which the data collection and analysis procedure are presented. Finally, we offer our findings and conclusions. Our contributions are threefold. First, we introduce a reflective learning process that through learning journals can enhance entrepreneurial learning and education. Second, we develop a conceptual framework based on andragogy and show that students’ learning journals act as a catalyst for free inquiry, self-sufficiency, and adaptation that deepens their reflective mindsets. Third, we show the value of the learning journal as a bridge between theory and experience in students’ learning process.

THEORETICAL FRAMEWORK

The major academic challenge for educators is to help students develop their innate abilities to be entrepreneurs. Many authors have described entrepreneurship as a unique capability that combines an individual’s skills and aspirations with satisfaction by realizing their individual inner needs, personal fulfilment, contentment, and achievement (Anderson, 2000; Anderson & Jack, 2008; Scott & Anderson, 1994). Accordingly, the nature of entrepreneurship presents us with a complex set of skills and abilities for the students to learn. A review of the entrepreneurship literature reveals that entrepreneurial learning is experience-based and that different abilities, knowledge, and skills need to be shaped during the student education process (see, for instance, Cope 2005; Johannisson, 1991; Neck & Greene, 2011). Engagement combines
this learning process with theoretical knowledge to increase awareness and enrich personal capability. We propose that a reflective learning approach captures these essentials in teaching.

The andragogical teaching philosophy focuses on creating reflective, self-determined, and flexible individuals, well in line with the argument that entrepreneurial expertise is developed through facilitating self-reflection and understanding one’s entrepreneurial cognition (Mitchell, Busenitz, Bird, Marie Gaglio, McMullen, Morse, & Smith, 2007). Andragogy is based on four assumptions relating to the learning process: a self-directing self-concept; use of experience; a readiness to learn; and a performance-centered orientation to learning (Forrest & Peterson, 2006). The goal is to develop “humans capable of adaptation, free inquiry, and self-sufficiency” (Forrest & Peterson, 2006: 116). Based on these assumptions, education emphasizes students’ feelings, reflections, and interests in the learning process (Clair, McClean, & Greenberg, 2002).

The concept of reflective learning has a long methodological tradition (Dewey, 1933; Schön, 1983) and has recently been used in various fields of management and organization studies. Currently, academic attention is focused on evidence of reflective processes that improve the self-development of students who benefit from being able to reflect on their learning and thereby develop their performative capacity. Based on this apparent connection between the search for reflective skills in the learning process and their performative capacity, we make the plausible albeit cautious claim that reflective learning is concerned with making sense from previously acquired experiences and leads to new, transformative learning. As Mezirow (1990: 1) has succinctly pointed out: “To make meaning means to make sense of an experience; we make an interpretation of it. When we subsequently use this interpretation to guide decision making or action, then making meaning becomes learning.” Transformative learning, therefore,
focuses substantially on the process of reflection and on how people intellectually and affectively make sense of and explore their experiences to develop understanding, appreciation, and new activity (Boud, Keogh, & Walker, 1985).

In trying to capture the essentials of the learning outcome, we can follow Schön (1983, 1991) when he describes the two dimensions of knowledge acquisition as reflection-in-action and reflection-on-action. Reflection-in-action, a component of knowing-in-action, takes place when an action is being undertaken. It is a unique characteristic that distinguishes professional from non-professional practice, part of the artistry or intuitive knowledge derived from professional experience. This is certainly the case for engaging students in a reflective conversation with oneself, shaping the situation in terms of the reflector’s frame of reference while always leaving open the possibility of reframing by utilizing techniques of holistic appraisal (Alrichter & Posch, 1989). Moreover, the different demands placed upon knowledge acquisition are met in what he calls “messy swamps” by professionals who are filled with uncertainty and where artistic and intuitive practices are essential (Schön, 1991: 34). Much of what professionals know is learned by doing in practice and through a process of alternating back and forth between reflecting-in-action and reflecting-on-action (Schön, 1991). In a similar vein, the reflective process is distinguished by recognizing the “map of learning” that permeates the positioning of reflection through the process of learning (Moon, 1999: 154). Applying Moon’s notion of the reflective learning process, a five-stage model has been used to comprehend how this dynamic process inherent in reflection and reflections skills results in transformative learning (see Figure 1):

1. **Noticing**: memorized representation

2. **Making sense**: reproduction of ideas that were not well linked
3. *Making meaning:* meaningful, well-integrated ideas linked

4. *Working with meaning:* meaningful, reflective, well structured

5. *Transformative learning:* meaningful, reflective, and restructured by learner-idiosyncratic or creative capabilities

Kolb (1984) claimed that students learn more efficiently by reflecting on each occasion in which learning may occur. That may mean that rethinking is required to review the ways in which conclusions have been made. This focus has been clearly accentuated by Gibbs (1991), who stated that “reflection emphasizes two elements: learner activity, in that it involves learners in actively processing their learning, and a well-structured knowledge base, through making learners’ own knowledge, and gaps in their knowledge, more apparent to them.” Dye (2005: 1) explains, for example, that the process of reflection guides students to their areas of strength and weakness and directs them to acquire additional knowledge to meet the standards of performance criteria required to become a competent professional.

**LEARNING JOURNALS**

Reflective writing, being an aid to thinking, has been justified and advocated by many scholars to use it in higher education as well as for adults to improve their professional performance (e.g., Barclay 1996; Bruner, 1966; Langer 2002; MacFarlane 2001; Moon, 2006; Piaget, 1928). Schön (1991) posited that professional education should be redesigned to combine the teaching of applied science with coaching in the artistry of reflection-in-action. Following this line of thought, we view entrepreneurship as a profession and therefore including learning journals in the course curriculum provides an important tool to foster an active and independent approach to learning. Moon (2006: 4) defined what actually constitutes a learning journal as “an
accumulation of material that is mainly based on the writer’s process of reflection” which has an important consequence, particularly in grasping one’s own learning process. Consequently, learning journals build thinking skills and create personal meaning for the students. They can have a wide range of features and aspects such as enhancing problem-solving skills, encouraging ownership of learning, and developing and supporting understanding and critical thinking (Dyment & O’Connell, 2010; Moon, 2006). Harada (2002: 1) describes journal writing as a “method that encourages reflection and metacognitive practice.” Metacognitive capabilities have an effect on students’ awareness and also on understanding their own learning process (McGuiness & Brien, 2006). Reflective writing in the form of learning journals thus provides a vehicle for entrepreneurship students to develop personally and professionally (Mills, 2008).

There are four kinds of learning journals in the literature: the unstructured journal, where students are allowed to create their own format and content; the structured journal, where the instructor specifies the format and the content; and the dialogue journal, where student and instructor use the journal as a means for communication, exchanging, and developing ideas (Langer 2002; Moon 2006). An additional example of work that has been called a learning journal is the writing of an autobiography as a means of exploring students’ pre-course conceptions (Moon, 2006). While it depends on the purpose of the learning journal, several authors recommend a structured learning journal. Barclay (1996), for instance, found that the flexibility of the learning journal created uncertainty and anxiety among students while more specific guidelines about how to write the journals resulted in more positive feelings about their benefits. In accordance, both Langer (2002) and MacFarlane (2001) found that a teacher’s guidance and formal instruction were beneficial for the students in developing their self-reflective critical thinking. Furthermore, Langer (2002) suggested that students may find it
difficult to understand the meaning of reflection and how it could be applied to practice, which further underlines the importance of proper guidance including clarity of expectations, training, responses, and good relations with the lecturer (Dyment & O’Connell, 2010).

METHODS

We used a qualitative approach that is consistent with our objective of understanding students’ learning process rather than measuring learning *per se* (Bjerke, 2007). We were also capturing meanings, experiences, and “the soft issues of students’ thoughts” that were not amenable to quantification. Further, we were searching for the meanings hidden behind their descriptions and comments (Hammersley, 1992) during the course of everyday education and practice. The focus was substantially on how students interpret, reflect, and make sense of their own situation. The journals were an individual compulsory assignment. The content of the journals was confidential and not subject to grading. The assignment was clearly written and verbal instructions on the expectations of the task were given, all in line with Dyment and O’Connell’s recommendations (2010). Setting the stage for critical reflections provided the students with opportunities to reinforce their reflections and explore a rationale for their actions. The emphasis was restricted to entrepreneurship, and students wrote journal entries once a week. Upon receipt of the journals, the instructor gave feedback of what to elaborate more on in the next journal. These data were collected over 7 weeks of a graduate-level entrepreneurship course taught by one of the researchers. The study was limited to 24 students. The following initial questions were asked:

1. Major observation/reflection through the week.

2. Comment/reflect on your working, thinking, doing, reading interesting things.
3. Learning process – List five personal learnings which you accumulated during the past week.

4. What are the goals for next week?

We generated conceptual themes inductively from the data in the students’ journals (Miles & Huberman, 1994). Of special interest to us were categories that focused on andragogy being relevant about reflecting over the learning process. To organize our analysis, we used part of the techniques used in grounded theory (Glaser & Strauss, 1967) and, in particular, the notion of “concept cards” (Martin & Turner, 1986) to identify the basic ideas and themes that emerged in the journals. We explored topics in students’ descriptions using the constant comparative method (Turner, 1983). Given the small sample of respondents, we manually analyzed “printed copies” of each student’s document looking for meanings and accounts that reveal information about their reflective processes and its consequences for their individual learning progression. Different kinds of issues and categories became apparent after analyzing several transcripts. This detailed examination of a body of data required refining and following up links between categories, ideas, and thoughts of the students with connections that were relevant to andragogy. This procedure enabled us to match themes with “closeness of fit” (Turner, 1981: 240). After identifying a degree of complexity for each of these categories based on theoretical considerations, we recognized theoretical accounts that expressed the conceptual essence of entrepreneurial learning and was further developed into the model presented here.

This approach allowed for a meaningful analysis of the students’ learning process in context, to explore learners’ experiences, and to gain an in-depth understanding of each student’s readiness to learn. Quotes from the data are used to provide valuable illustrations and supplements to help categorize them (Wolcott, 1990). In sum, the value of this research design
lay in its capacity to provide insights, rich details, and descriptions (Geertz, 1973) to produce in learners an educational awareness of their needs and which stimulated their knowledge to yield educational insights.

**FINDINGS AND INTERPRETATION**

Our research provides support for the andragogical learning approach based, in particular, on students’ reflective skills. In this regard, our findings move away from the predominant positivist view of entrepreneurial learning that in general considers entrepreneurs as fixed units and the learning process as an external objective method (Higgins & Elliot, 2010). On the contrary, this paper contributes to the existing understanding of entrepreneurial learning process by recognizing students’ reflective experiences and even showing how they learn from reflection in the context of graduate education. The research took place in the classroom and was based on the andragogical approach which generally questions orthodox pedagogies. Our findings show that applying a learner-centered philosophy in teaching entrepreneurship facilitates students’ ability to recognize their “learnings” through their educational experiences. For instance, it illustrates the powerful role of reflection in the students’ learning process. Further, the learner-centered philosophy infected them with enthusiastic self-development while simultaneously encouraging them to enter the desirable “transformative stage of learning.”

By analyzing the students’ writings in their learning journals, we developed a conceptual framework of entrepreneurial learning (see Table 1). In trying to capture the essentials from our data, we suggest that these various concepts derived from learning journals be presented in a typology in accordance with the andragogical teaching philosophy. Our conceptual framework is thus inspired by Forrest and Peterson (2006) and Knowles’ (1977) line of thought regarding learning through andragogy, and shows students’ use of a learner-centered educational paradigm
that acts as a catalyst for free inquiry, self-sufficiency, and adaptation and deepens their reflective mindsets. Our framework also illustrates some of the results of using learning journals in entrepreneurship education. In what follows we give examples derived from students’ reflective writings that exhibit aspects of the learning through andragogy synthesized in Table 1.

**Self-concept: Self-directing personality, self-awareness, self-assessment**

Pavlovich, et al. (2009) suggest that learning journals provide a method for developing “self-concept” within the entrepreneurial education context, mainly by exploring how effective design and assessment of reflective journals assist developing student’s self-knowledge. Learning journals appeared to carry three distinct sets of meanings that took on a higher sense of purpose of studying and learning: self-directing personality, self-awareness, and self-assessment. These seemed to have far-reaching consequences of how students conceptualized their own experience with new knowledge. For instance, students were critically analyzing their experience within the group that demonstrated personal and clear self-directed reasoning. The focused nature of the reflective tasks was on self-assessment that indicated the pervasive affective elements. Some quotes from the students’ learning journals illustrate these:

1. “Through him [my father] I have seen some of the positives and negatives of owning your own company and believe that my skill set has some of the traits necessary to be a successful entrepreneur.”

2. “I question whether I am making the right choices for my future that will bring success. Yes, I have a good job and am paid well. However, am I doing something that nourishes my soul?”
3. “During one film it stated that entrepreneurs are becoming younger and younger each and every day. I feel after learning this fact I can start my own business and I am not as hesitant now to do so. During these seven weeks of class many of my classmates brought to the table different aspects that they have been through. I have learned a lot.”

Self-concept was often equated with “critical” self-evaluation and was seen as assisting in learning-centered processes. Learning centered process also appeared to represent developments of self-directed student’s personalities which were linked with self-assessment and self-awareness. To wit:

1. “I’ve said it before, and I’ll say it again, I don’t think of myself as an entrepreneur. This is to say that I’m not creative in certain ways, but I’m pretty sure my creativity isn’t going to lead me to a career path I love. However, after reading the articles, etc., I certainly won’t stop looking for opportunities that could turn into a larger idea. I think this is how most entrepreneurs get started. Some are big, grand ideas that take years to formulate, while others, when broken down, are so simple but yet so effective. Maybe I too will be inspired someday to create something so useful that it can benefit many people.”

2. “… these films also led me to consider my role within and perception of our financial system, how detached I had considered myself from it, and its overall impact on me as an entrepreneur.”

3. “As a child brought up by first generation [country name] parents I was surrounded by a culture that considered females inferior to males. … Despite that, my parents chose to educate their daughters. … My upbringing instilled in me an awe of female entrepreneurs; those who rise above their challenges – they are my heroes.”
4. “I could not have anticipated that the article would have such an effect on me. All week I have pondered about what the future holds, but I have decided that whichever direction I take, I will be great. I am going to apply for the remaining position at my company and I have also looked more closely at my peers (my competition). I began to evaluate what characteristics differentiate me from my peers? Do I have a sustainable competitive advantage?”

5. “I find myself most happy and excited when I am working on my own business. I do get nervous, but it is natural when you know you are going to be risking money.”

6. “I never took a business class as an undergraduate, and largely see financial investments like gamble and the markets as too risky for my blood. However, that does not prevent me from seeing the good in taking such chances. Money can be made, and dreams can be fulfilled. … I am an idealist at heart, and see that the groundwork is there for me to build upon.”

**Learner experience: Experience is built, examined, and expanded**

The persistence of learner-centered experiences throughout the reflective thinking and sense-making can also be understood through the role of students’ past and current experiences. Thus, the more experience that each classwork provides the better, more eager, and informed the students become. So taken together, learner experience appears to create a basic foundation of the learner-centered approach. Some quotes from students’ learning journals illustrate how students relate new learning to previous experience:
1. “The restaurant company, which I work for applies this model when starting the company and when opening a new restaurant or new restaurant concept. They make sure that they are properly aligned with government laws and state, local and federal guidelines. They also make the decision on where to open the new venture using socio-demographics.”

2. “This company ‘Food From The Hood’ I believe was a great idea. I feel like I could relate to this idea because since I am younger I already have intentions of opening my own company with my softball mound business.”

3. “I watched the Olympics this week. It occurs to me that athletes possess many of the same qualities entrepreneurs do – perseverance, confidence, ambition, discipline, commitment, creativity, and resourcefulness, to name just a few.”

Many students highly regarded the learning context, and what they said was strongly absorbed and assimilated. At the classroom level, experience was particularly meaningful because the specific learning context provided space to examination and explanation. One commented as follows:

1. “We also discussed the importance of scanning and monitoring the environment in order to stay successful as an entrepreneur, once you’ve launched your idea. This reminds me of something I read on an innovation blog that I am a member of. One of the members wrote about how some business owners are rigid and unwilling to change with the situation around them. He said, ‘if we blindly follow through on every customer’s requirements we would surely fail.’”

Indeed like McGee, et al. (2009) explained, roots of self-efficacy are to be sought because reflective thinking is highly personalized and rooted in experience. An emphasis on personal learner experience is seen to be a prerequisite of sense-making and fits with the findings
of Mezirow (1990). Also Mitchell, et al. (2007) identified connections between experience-based sense-making and entrepreneurial cognition that is a key element in self-reflection. This is illustrated as follows:

1. “I was taken by the observation of personality traits of entrepreneurs. Obviously, these are driven people with high ambition and creativity. … However, with the business acumen of an entrepreneur coupled with this, I’m troubled by the seemingly endless egoism that can surround the entrepreneur. I have been freelancing marketing consultancy work with an entrepreneur who is nationally renowned, and I’m startled to find that he has become as successful as he has without any interpersonal skill.”

2. “It does confirm beliefs that I held previously, that there are gender specific challenges that women face as entrepreneurs… But is this any different from the challenges that women face in any career or in almost everything they do? … I actually have witnessed it - [Company name] appointed females in ‘token leadership positions’ who as part of that leadership team would be the ones who would plan the meetings for group – taking on administrative roles.”

3. “She is one of the most talented artists I know and also one of the most compassionate yoga instructors I know. This week she has been struggling with giving up on her dreams of pursuing these passions since the last two years have been very difficult. This ties back to some of the things we are learning in class. She is extremely talented, yet is having trouble succeeding… There are others who might be less talented but they are succeeding… There are so many factors that could come into play here such as networking, positive outlook, determination, etc.”
4. “Another interesting reflection for me relates to my work as it ties in with the reading from this week. I work in the market research department where I focus on customer loyalty for commercial real estate tenants. … According to the study, the top two keys to success for the service industry were reputation for quality and good management. This matches with my experience with our tenant surveys because we typically see these factors as being very important to our tenants.”

5. “The article I read this week by Saras Sarasvathy really inspired me. I would definitely classify myself as an effectual decision maker due to the fact that I started with the means and created a target audience that would benefit the most. … When I read the article, much of what was written resonated deep within me.”

To many students, the desire to be recognized as entrepreneurial was an integral part of their experience-related reflection. This made their reflection process somewhat ambiguous and in need of continuous call for examination and re-examination. Here’s one in particular:

1. “Our movie session on Wednesday brought a different aspect of entrepreneurism to me, and I think it helped me to see things more outside the box. Since then, I see entrepreneurism and entrepreneur differently. This experience added the facet of social entrepreneurism that may influence my decision as to how I may put my education to work in the future.”

**Readiness to learn: Experience being utilized, needs, self-motivation**

Despite the usefulness of the foregoing illustrations and analysis of learner-centered aspects of student’s reflection, the fact remains that not all elements related to reflective thinking influence students with equal force. Therefore, it becomes equally important to understand other determinants of students’ self-development. Readiness to learn appears to be closely related to
personal needs and positive self-efficacy perceptions that correlate with immediate self-motivation. Some illustrative quotes from students’ learning journals:

1. “… the section that detailed the industry lifecycle curve was most interesting to me. The utility of the curve became clearer to me when I compared it to what I have seen in the consumer electronics industry.”

2. “… [I] decided to further my research in order to enlighten my classmates of what I learned from my research so they could also be able to better understand the concept of Virtual Teams (VT). To do so, I decided to engage in some discussion forums on the Internet in order to get points of views of people involved in VT.”

3. “I want to put into action my own plan for a new idea, turn myself into an entrepreneur. I might not follow through on this idea, but I’d like to establish a plan to see from their perspective the amount of work and passion required to develop into a fruitful collaboration.”

4. “Outside of class, I have been watching introductory economics lectures from Yale’s Website in order to supplement my knowledge in this area. … I feel that watching the videos in class coupled with the lectures that I have been watching online have greatly contributed to my learning with regard to economics and that they have prepared me for further learning about entrepreneurship.”

Thus, readiness to learn can be identified by enthusiasm that represents a behavioral manifestation of students’ intrinsic motivation (Patrick, Hisley, & Kempler, 2000). The direct impact of enthusiasm has been observed in a class that promotes forceful discussions linked to advanced and forward-looking learning capacity. Some examples are:
1. “I find myself yo-yoing back and forth between readings in the text and articles and my instinct. … Since the readings are directly pertinent to my current endeavor, I find them extremely useful and motivating.”

2. “My goal for the week is [to] conduct a SWOT analysis, evaluating my strengths, weaknesses, opportunities, and threats. A critical evaluation of self-perception can help me identify and more adequately control my future path.”

3. “I like doing research on new companies. It opens up my eyes to different ideas and I can use those ideas in my everyday life.”

**Learning orientation: Student-centered; immediate application**

Seen from the learning orientation, it was not really surprising that immediate application of new “learnings” so strongly remains in the classroom. Not only did it confirm students’ sense of themselves as “learners” but it was also seen as helping them secure their entrepreneurial thoughts on account of their new status. A student-centered learning orientation entails a purposeful self-directing personality and student self-assessment. Some students indicated immediate application enhanced by classroom discussions and by case illustrations. They were also reflecting on their own life situation which allowed them to see the new perspective. Some illustrative quotes from students’ learning journals include:

1. “My father is an entrepreneur craftsman … [He] learned that his best employee was suffering from advanced hepatitis. … I have learned and appreciated that the makeup of an entrepreneur is the need to respond to any kind of challenge and adapt in the fastest and most effective way.”
2. “… the idea of having role models for women and this difference between a mentor and a role model. … I took this discussion from class and spoke with my management team and we are going to implement more mentors on our sales team.”

3. “I think it would be good to highlight once a week or a month on my Facebook page, a different charity. I think it would bring more exposure in my circle of friends to different causes.”

4. “After viewing last week’s video in class, I could not wait to get home and make something happen. In undergrad at [name of school], some fellow classmates and I started an organization called SEW. This is a fund in which we raised money to invest through Kiva.org. … I decided that I am going to donate 20% of profits to SEW so it can be invested in women who are in need.”

5. “Looking around the community, I find myself trying to differentiate which businesses are entrepreneurial enterprises and which are just status quo small businesses.”

6. “I have been going on interviews and my new understanding of the fiscal world has led me to hold my own in economic conversations and financial discussions. I finally feel confident enough to participate in these conversations, and am ready to begin engaging the questions raised by this class in a more professional setting.”

7. “While these descriptions and our discussion last week seem to suggest the ability to be an entrepreneur might be engrained rather than learned, I also considered [how other lives changes and we readjust as seen in scheduling my new semester] whether people and situations can change as well to foster or become more supportive of an entrepreneurial spirit.”
8. “Reflecting on the reading this week I have been thinking about how I can ‘connect the dots.’ Looking for patterns on how I can apply seemingly unrelated events into a product or service that would be beneficial to an industry or audience/market. As I go through my daily interactions with different businesses I try to reflect on ways I can improve the interaction I experienced [with a service] or product purchased with a ‘newness’ that will meet the needs of consumers more effectively.”

9. “Because of my background in marketing and business, there was a learning in one of the articles we read this week that really struck me as interesting. It was the idea that in most classrooms and in business and marketing in general, there is a tendency to focus on a causal process …”

10. “It made me think of some of the best managers I have had and a common characteristic that they have had. That characteristic is that they were risk takers and they were okay with having people in their organizations take risks that might end up failing. Maybe these managers are entrepreneurs in their own way.”

**Improvement of self-development: Experience-based to develop own skills**

A key consideration in the improvement of self-development skills is the culture in which these activities are embedded. The student-centered learning culture evidently shows increasing interest to be lifelong learners. Improvement of self-development was also instrumental in securing more long-term concerns and assurance to develop their own skills. Although improvements of self-development meant many different things, some were longer-lasting than others. Reflective thinking became one of the crucial aspects of the lasting effects of self-development. Quotes from students’ learning journals that illustrate this include the following:
1. “I witness technology and its effects on my work life on a daily basis. Our drive to have agile workplaces across the globe; to be connected anywhere, anytime has created an environment that is gradually limiting face-to-face contact. We are progressing to all virtual teams in every aspect of our ways of working at [Company name]. … You must learn to effectively communicate without depending on non-verbal components, such as our reliance on body language or facial expression. We are all still learning. It was interesting to hear one of our younger classmates who noted that this type of communication provides you with the ability to think about what you’re going to say. That is a novel approach for me and not something I ever considered …”

2. “I get very inspired about movies we saw about social entrepreneurs. It opened my mind as I would not have thought about associating an entrepreneur position with a social issue. As I became very intrigued and most interested, I decided to further my research on this subject.”

3. “I want to do additional research on art entrepreneurship. I am really interested in the entertainment industry and want to see more of the relationship between art entrepreneurs and marketing the products.”

4. “After our exchange in class, particularly in the area of obstacles that women face I decided to further my knowledge on this topic to look further into some interesting takeaways.”

5. “Doing some research on this topic I learned that there is still a big gap between the number of men and the number of women participating in entrepreneurial activities.”
6. “So fascinated I was by this video that I went and finished viewing it at home on my own time. I even went online and read current business periodicals to see if I could apply any of my new knowledge.”

7. “Over the weekend I was watching a show on various Entrepreneurs and how they grew their ideas into something bigger. … I never would have thought twice about watching a show like that, but now, my views on business have changed greatly, so it’ll be interesting to see what else I can learn about.”

**Awareness of shortcomings and strengths: Self-sufficiency, adaptation**

Awareness initiates the process of reflection and, as Scanlon and Chernomas (1997: 1139) posit, “… is the cornerstone of reflection. Without awareness reflection cannot occur.” Below, students’ awareness of their strengths and weaknesses as described in their learning journals are shown:

1. “… was the acknowledged ignorance I have regarding fiscal issues. … but I was fascinated to learn about the roots of bookkeeping and money.”

2. “I’ve also learned that I really need to work on my time management skills. … I need to organize and focus more.”

3. “The only change I have to make is staying positive and not allowing one ounce of doubt [to pervade] my mind.”

4. “I think that I have to be taking huge leaps and bounds, but I have to make sure I take the time to look at all I accomplished so far or else I will never be content. I think to some extent feeling as if I can always do more and do better is a good thing, but if you get carried away it can negatively affect your entire attitude.”


5. “I love the idea of being an entrepreneur and I feel that I have a strong idea with my [softball] mounds …”

These findings were consistent with those of, for example, Anderson and Jack (2008) studies that found that budding student-learners were particularly likely to develop individual needs and also awareness about their own inner needs, their strengths and shortcomings. Further, they effectively utilized experiences with personal and contextual knowledge and directed their own attention towards awareness about their own discoveries that can only enhance their future entrepreneurial standing. Some examples follow:

1. “I wish I had some guidance from someone who has gone through this entrepreneurial process of initial research gathering. It would be helpful, and I could use the encouragement sometimes too!”

2. “This article has helped me to see the necessity of expanding the categories of knowledge that I apply to new ideas that I learn.”

3. “In some sense, I feel I have been very detached from any information regarding investments and stocks. I had always envisioned this to be the work of those versed in business and finance.”

4. “Reading about the creators of Google and how they rose because of the constraints they perceived with the existing environment, and they defined the way. And then they defined how it would work so much differently than anyone else had done before them. I find this type of thinking so exciting, so energizing. I would love to be able to do this. Can it be learned? Must you unleash something within yourself? Is it too late? Is it ever too late?”
5. “I particularly liked the article on self-efficacy and how it says, ‘Individuals tend to choose situations in which they anticipate high personal control but avoid situations in which they anticipate low control.’ It’s so true, and I think I need to be more like these people. I need to start taking control over the situations – especially at work – instead of them taking control over me. I need to focus on what’s important and work towards that end goal.”

6. “… taking stock of my past accomplishments, I discovered that the ability to communicate effectively had contributed the most to my professional success.”

**DISCUSSION**

In synthesizing these different issues, the overriding finding is while the students are often adults with a great store of experiences, it was also apparent that those adult students hold different sets of experiential standards. As our review of their journals highlights, students’ reflective skills were multifaceted and the range of skills depended on their sense-making, personal abilities, situations, and experiences. This combination of classroom discussions and written learning journals could also be seen as two reinforcing elements for deep learning. As illustrated by the quotes below, some students are more inclined to verbal expression than others:

1. “I enjoy expressing my opinion every chance that I get. I would rather offer my opinion or my thoughts on a topic than keep my mouth shut and let the topic pass me by. Maybe that is a fault of mine, but I am not sure. I feel that everyone has something to say but do not want their colleagues to judge them.”

2. “We’re all in the same boat, but sometimes I feel like a fish out of water in my classes. However, anytime I’ve sat and remained quiet, I usually knew the answer in my heart, so it’s a matter of sharing the fact that I do know some things.”
Moreover, the learning journal’s status as a tool for reflective learning is acknowledged by some students. One elaborated on the learning journal in this way:

1. “This has been an important experience in my learning process because it has forced me to revise my thoughts all the time.”

Another pointed to:

1. “… design of the course with learning journal in focus have learned me how to learn.”

The importance of understanding the process of entrepreneurship learning has been emphasized by several scholars. For the most part, entrepreneurship learning has been seen as a prevailing subject-oriented education and often difficult to acquire in the classroom environment. In this paper, we moved to a learner-centered approach. Given the importance of reflection, these students have been stimulated to learn through their journals. That was in tune with Politics’ (2005) conceptual model that distinguished entrepreneurs’ career experience, the transformation process, and entrepreneurial learnings. Following her model, our study demonstrates the potency of an andragogical philosophy of teaching entrepreneurship. We have, for instance, enriched Politis’ (2005) model by recognizing the powerful dimension of reflection by using learning journals and thereby improving students’ self-development process. In doing so, we focused on different dimensions and added principles of empowering students through a learner-centered philosophy. We show that several beneficial outcomes of journal writing are persistent and prevalent:

1. Reflections appear to be a fundamental part of our life, and were used by students as a means of self-expression and as a way to make sense of their learning.

2. Learning journals reinforced course objectives and promoted positive attitudes and understanding of entrepreneurship knowledge.
3. This approach forced students to read and act much more regularly than they normally would do.

4. Learning journals increased students’ responsibilities for learning, making them more engaged with the material.

5. Reflecting on the class material continued from one journal to another. This means that students were actively thinking and reflecting in more than one journal. By doing so they prove that some parts of the course material were more engaging.

6. Learning journals helped to develop a positive learning outcome and opened up the potential for personal growth.

7. The students realized their learning outcomes through reflecting on the past and planning for the future.

8. The experience gained has been revised within the framework of journals and thus reinforced students’ self-awareness.

Recognizing the shortcomings of exclusively using subject-centered pedagogy in entrepreneurship courses, we suggest that while instructors use textbooks to introduce the theoretical basics of entrepreneurship they should consider including learning journals in their curriculum as an efficient complementary teaching tool. This would improve students’ understanding of the subject, their connection of theory to practice, enhance their reflective thinking process, and improve their innate ability to self-develop. Our analysis of these issues leads us to maintain that in teaching entrepreneurship we need to consider the relevance of learning outcomes in terms of meeting our constituents’ needs. While we realize that our study is at best indicative (because of the small sample), we suggest the need for a focus on learner-centered entrepreneurship education.
We realize several limitations to our approach. This study’s major limitation is the small sample size. The graduate program at Lund University has a distinct adult student population, with the majority having work experiences ranging from some to extensive. Students who applied to this program came from various educational institutions, and the class was not homogeneous regarding their age, education standards, and cultural background. Hence, learning outcomes will vary based on the institutional setting and student population. On the other hand, it would be interesting for future research to contrast how a learner-centered philosophy impacts students and their learning results compared with other methods. Moreover, we did not observe other advantages of reflective writing such as writing skills so there are conceivable spill-overs from using our approach. Finally, using this course as a quasi-experimental study did not permit for rigorous control compared to a true “laboratory” exercise.

CONCLUSION

The learning demonstrated in this paper goes far beyond simple knowledge acquisition. It includes new insights about the performative capacity of students to act and new reflective self-awareness that enhances students’ entrepreneurial mindsets. This study documents the learning process and concludes that learning journals have many benefits for students’ understanding of the course material. For instance, they appear empowered to take more responsibility for their own learning process, which is important when applying a learner-based pedagogy. The value of the learning journal is that it allows the expression and clarification of individual experience within the learning process. This expressive self-clarification is one of the fundamental components of education. The challenge to both instructors and students is to remain reflective on the process by which students make sense of their experiences in a business context and connect with theory, thus becoming active learners and thoughtful practitioners in line with what
Raelin (2007) calls an epistemology of practice. To conclude, we realize that our findings are only indicative of the type of teaching approach we have used and that there is no fixed methodology for teaching entrepreneurship.
REFERENCES


FIGURE 1
Transformative Learning as the Outcome of Reflection

TABLE 1
Conceptual Framework of Entrepreneurial Learning

<table>
<thead>
<tr>
<th>Reflections</th>
<th>Learning through Andragogy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-concept</td>
<td>Self-directing personality, self-aware, self-assessment</td>
</tr>
<tr>
<td>Learner experience</td>
<td>Experience is built, examined, and expanded</td>
</tr>
<tr>
<td>Readiness to learn</td>
<td>Experience being utilized, needs, self-motivation</td>
</tr>
<tr>
<td>Learning orientation</td>
<td>Student-centered; immediate application</td>
</tr>
<tr>
<td>Improvement of self-development</td>
<td>Experience-based to develop own skills</td>
</tr>
<tr>
<td>Awareness of shortcomings and strengths</td>
<td>Self-sufficiency, adaptation</td>
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</tbody>
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