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Conversational Storytelling: Classroom Teaching through Story Parallels Entrepreneurial Need for Engagement

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Introduction

Someone recently asked me, "What do you do in your class? I mean, I walk into your classroom, sit down, then what happens?" Ok, I thought, I know how to answer this question: I wanted to enthusiastically explain the structure of the class as a theoretical blend of psychology, engineering design methods and art; discuss the intentional purpose of building the curriculum iteratively and differently every term, based on the unique developing social dynamics [13, 41] of every class.

Something stopped me and I resisted responding. In that moment, I remember feeling the need to shift from an automatic theoretical response [48] to some other, hopefully novel approach, that would underline how I teach; clarify what occurs in the classroom. I thought I had the answer as an Instructor. And, as I struggled in my response, to do what I teach, and avoid responding with a rehearsed, practiced pitch[24] , I realized that the response in my head to the question, "What happens in your class?" was a conversation stopper. It was necessary to formulate a response that was a conversation starter. Thus, I began sifting through the memorable moments in my mind, to find a short story that would invite someone right into the classroom and step into the role of student; a student required to act as both storyteller and audience. And, at the same time, consider how the story might inform the early stage Professor preparing to teach for the first time– a concept often parallel to the inspirational phase of an entrepreneurial venture. One must figure out the passion and iteration on the product, the new creation, and who the audience is.

Imagine the experience as a student in the class:

Jon walks into the classroom and sits down at the long seminar table. He quietly suggests that while he is feeling confident about what he has done in his accomplishments at school, coordinating early seed funding for his start-up, he is not feeling so good about what is next for him.

During the first moments of class, Jon begins his story, "This is my last class. I am fulfilling my final credits for the graduate program in Mechanical Engineering," He continues his story in a comfortable, conversational manner, and quietly leads with the emotion behind his work, "We started this little company that makes and analyzes affordable and reliable blood tests that will change the health and wellness for people in remote areas of the world. For the first time in their lives, millions of people in third world countries will receive the care they need and deserve." The classroom was silent. The non-verbal responses of the other students in class indicated variations of effective engagement. Their bodies moved forward – some students are leaning towards him, others adjust their bodies so they can get a better view, all are focused on Jon, all eyes are riveted. When Jon stopped speaking, the room is still. There are different kinds of silence; you feel it immediately – this is a silence of deep engagement.
The Instructor breaks the silence, "What are your impressions of Jon's story?"

Classmates in graduate engineering, design, business, law, and humanities make it clear to Jon that he is a natural "conversational storyteller." One classmate explained, "Everyone can't do what you just did. You make it understandable and comfortable. And it's a meaningful, memorable story – it's clear to us that you didn't do the start-up just to say you did it. " They all left the classroom that day, planning to do the homework Jon inspired: create pages of short stories from every part of your life. Be so comfortable with the stories that they become second nature, a natural way to respond, and reliable preparation for a conversation with a classmate, an advisor, a team mate on a project, an interviewer for your dream job, a venture capitalist, a board of a non profit. They also wondered what Jon meant when he suggested he was not confident about his future. We will return to the story of Jon later in the Conversational Storytelling section of the paper.

Overview

While everyone is not a natural storyteller, the use of storytelling-based learning[25] (SBL) in classroom teaching is a great way to come up with innovative solutions, often parallel to entrepreneurial ventures. If this is sounding a bit ambiguous – it is our intention to explore just that – the relationship between the ambiguity in conversational storytelling and engagement to maximize new creation with four concerns that emerged during observations of our teaching and work with founders. Four concerns are examined in the context of classroom teaching in one specific Graduate Design Methods Class with applications to other settings: 1) The blurring of entrepreneurial level concepts with individual-level story phenomena, 2) The misleading characterization of a successful storyteller as extraverted, 3) Over-reliance on specific strategies, and 4) Implicit acceptance of current Silicon Valley models.

The focus of the current work is on providing an approach that alerts participants to the distinction between conversational storytelling and overly rehearsed pitches or presentations. Unlike the recipe that begins with a "frame, then practice, practice, practice, and deliver" for successful preparation for a TED Talk [4] the current work examines how one specific element: asking questions, evoke a natural conversation to create a series of stories, easily applied to new settings. Informed by the authors previous works[15] on entrepreneurial first moments and storytelling based learning , conversational storytelling is defined by questions and the artful ambiguity of being comfortable with the unknown—specifically by using newly tried, spontaneous, and/or aesthetic approaches that informs understanding and, in turn, readiness for responding to what's next.

The concept of conversational storytelling is not new [6, 31, 59]. And, the idea of conversational analysis has been recently researched with a focus on affectivity[59] . Affect refers to feeling. The authors define feeling in its broadest definition of emotion learning [60] and consider emotion, not for emotion sake, rather emotion is discussed when it is attached to an idea. Drawing upon proven methods from social-cognitive psychology and design thinking, we will show that specific, questions facilitate participant's unique development of ideas and sets the foundation for conversational storytelling. Use of planned action, in the form of question or prompts, generates a

reflective practice setting, and induces a natural conversation to create a series of small stories [6, 31], easily applied in new settings.

A commitment to storytelling means more than learning and applying one prescribed step in the process of design thinking. To clarify how the best answers contains a conversational storytelling theme whether for an interview, discussing a research project, or teaching a new class, we begin by offering the methods of the course through which planned prompts/questions are utilized as a tool to encourage conversational storytelling. Then the theory and practice of conversational storytelling in the classroom setting contains an entrepreneurial parallel that is organized around a discussion of four concerns. Finally, implications are considered.

Method

The mixed-methods of socio-cognitive psychology, design thinking, and projective cues[30] used in this work fulfill multiple purposes. Projective cues refer to the diagnostic imagination prompts directed at finding and telling a story, like "draw a picture" and "tell a story" developed in 1943 and validated by famed psychologist, Murray[70]. Through the applied methods, the process of finding personal stories to encourage conversational storytelling, are introduced to surface responses that emerge during the developing levels of engagement in the class, team, project, or start-up group. From the first moments, participants are encouraged to be ready for a class environment that includes some degree of unknowns, referred to as ambiguity[49]. In other words, the Instructor encourages them to test themselves and ask, "How genuinely open are you to not knowing what is going to happen next?" Many students reluctantly say they are willing to try, but claim this it is not an easy practice.

Students discover the characteristics of story as they experience it with the class. In this sense, storytelling is emotionally co-imagined.

Previous work[25] defines the SBL as an environment where individual participants act as both storyteller and audience member. In both of these roles, specific use of the concepts of mindfulness[48] and social proof[39] provide a theoretical foundation and draws from constructs in socio-cognitive psychology. In the context of mindfulness, the aim is to consciously create new categories and levels of awareness. In practice this is done by discussion through reflective questions from both facilitating teacher and the class. Relevant here, is that while there is a syllabus that includes organizing questions, short readings, and proven methods, the developing dynamics of each class impacts the curriculum. Therefore, as the class evolves, so does the curriculum, distributed in three iterations. More important, every class contains prompts, or specific questions, that are only sometimes distributed in advance. A degree of surprise helps perpetuate the ambiguity. Additionally, imagination is sparked in the moment. The surprise adds a natural element, encouraging conversational responses, along with preserving the potential for new creation.

The questions and reflective practice of the classroom evoke a natural conversation to create a series of small stories[6] used in the classroom, and easily applied

in new settings. Small stories are created during class. Recent work also includes the option of making short videos featuring individual and paired student short, stories.

Conversational Storytelling Engagement Concerns

This section outlines the relationship between ambiguity in conversational storytelling and engagement for successful new creation through four concerns. A review of student work, and both student and founder self-reports suggested specific roadblocks, referred to as concerns. We provide the concerns, and offer the results with action guidelines for structuring and supporting change by showing reaction to the process. The following four examples, uncovered from exploring conversational storytelling and an SBL approach in multiple offerings of one class, demonstrate how story messages may be misinterpreted. Student misunderstanding of their own motivations and their ability to mobilize and engage others may occur due to:

1. Blurring Entrepreneurial level concepts with individual story phenomena. Many confuse the big picture definition of entrepreneurship with individual level entrepreneuring activity. Specifically, audiences sometime assume that the confident, clear entrepreneur's delivery of his story indicates an equal strength of conviction, and clarity in their personal life. In fact, the reality may be something very different. During the first class meeting, Jon (introduced earlier) a graduate student and new company-founder, confidently shared his non-profit company success to the class. "We started this little company that makes and analyzes affordable and reliable blood tests that will change the health and wellness for people in remote areas of the world. For the first time in their lives, millions of people in third world countries will receive the care they need and deserve."

The room was riveted and drawn into Jon's natural conversational storytelling. But the class was unprepared for his closing statement, "I am confident in what I do, but not in who I am." By assuming that Jon's confidence in his work, aligned with personal connection with his story, the student's in the class found a valuable opportunity for growth. He made an impact on the audience, and offered everyone the value of exploring the internal paradox.

2. The misleading characterization of a successful storyteller as extraverted. Some ascribe extraverted personality characteristics to successful storytellers. The literature on leadership[33,40] informs that effective leaders, like effective storytellers[55], come in all different shapes, styles, and approaches.

Powerful storytellers may be perceived as more reserved, also referred to as introverted[10]. The following scenario illustrates how generalized characterizations of personality may mislead: Consider a moment in class when a student who had never spoken, quietly tells his story, "I was born in China. You don't talk about yourself, you don't discuss your work or how you feel. I never thought that I would be here discussing my story, and remembering standing in front of the entire university last year, receiving an award for achieving the highest GPA." Immediately the eyes of many of the other students flickered with appreciation, awe, and recognition. Why? What did it all mean?

3. Over reliance on specific strategies.
There may be more value in avoiding specific strategies. Many assume that researched strategies will result with perfection in delivery. In fact, such an approach may produce the opposite response.

During one class, Andrea, shared her family's farm story, using the family business's consulting company's film approach for a story template. She was unprepared for a classmate's thoughtful response, "You don't sound like you. What part of that story is your experience?" By assuming that the tried and true marketing approach was effective, she did not tell the story she planned, and did not elicit emotion that showed a personal connection with her story. She alienated herself from her family legacy story, and achieved the opposite of her intent to deliver a meaningful story that didn't mislead the audience or sound pretentious.

4. Implicit acceptance of current Silicon Valley models.
First, any debate about current entrepreneurial success or failure that is based solely on Silicon Valley history is miscast[58]. Nonetheless, proximity and geography provide a powerful force for consideration in the current work. Students in one class suggested that studying and living in Silicon Valley not only provided a lopsided view to their entrepreneurial storytelling, it was also a detriment during their job search in the area, potentially making them a non-appealing job candidate for a Silicon Valley position. Perhaps it may be counter-productive to accept another's company's culture or model as your own. Every culture and every context is unique. In fact, there are reasons to reflect carefully on the past, your current work, to imagine a powerful future story:

Darren, previously a race-car driver and general manager of a global company, began an internship at an elite silicon valley company. In the middle of his story, he explained his struggle to the class, "I am not easily swayed by big company success. The regional advantages of Silicon Valley aren't a fit for the work I am planning in South Africa. Sure they want to hire me, but do I want to work there?"

An apparent shift in how students define and internalize the meaning of entrepreneurship emerged. Darren offered the class an opportunity to find the distinction in their stories: a wish to lead their own company vs. being a Silicon Valley entrepreneur.

SBL Organizing Questions	**Responses Facilitate Small Stories**
1. Imagine the title, travel back in time story that you tell your 8th grade self.	1. Excel at work and ready for transition.
2. What is the difference in the audience response to the narrative vs. their response to the storytelling?	2. Be capable of finding strength in your unique approach and ways of knowing and showing your story.
3. Where is the heart in your story?	3. Develop other than template ways to live, formulate, and tell your story.
4. Where is the conflict in your story and when did you cause that conflict?	4. Seek a strategic understanding of the plot points along the way of your story.

Table 1: Storytelling Based Learning (SBL) Organizing Questions with Response Themes as small Stories

We report on how teaching engineering students to create compelling conversational storytelling as small stories is enhanced by the use of asking specific prompts/ SBL questions in Table 1, addresses the four concerns, described above:

1. The in-the-moment response from Jon offered the class an opportunity to reflect on what they cared about in their work, and the choices they needed to make in their personal lives to create something new. The salient parallel between changes across the developmental stages of their work to transitions in their personal life emerged. A method developed in previous work on entrepreneurial leadership that led to the SBL[42] applied.

The Question:
Imagine the title of your story as a, travel back in time story, that you tell your 8th grade self. What would you say to your 8th grade self?

Response:
Jon remembered his 8th grade self, "I was wearing flip flops, climbing out of bed 10 minutes before school started and walking down the street to my school, not paying much attention to classroom stuff. It was a fun time of my life. I couldn't wait for after school, I was raised to be a sailor and dreamed about sailing with my strong Dad." The class laughed and enjoyed the vivid, active images. He was more serious, however, adding something that surprised the class, "I was a skinny kid that was unsure of everything, looking down at my feet all the time; with one exception: I was a piano player, and by the way, I don't typically talk about playing Rachmaninoff." His story resonated with other students in class. They appeared affirmed. One student informed Jon that his story helped her understand her reflections on her younger self, and the distinction between her choice to work on a Ph.D. vs. taking a high paying job. Her claim, "When you know you are exactly where you should be, these moments are fleeting, and uncertainty is added to your daily thoughts."

2. Through the storytelling approach Ryan's narrative, depicted clearly on the screen in front of the class, eloquently outlined a powerful path from China to graduating at the top of his class in a top engineering program in the United

States. The class was afforded an opportunity to see the story as a narrative and then hear him, in his own words, conversationally tell the story. Additionally, "the 8th grade self" prompt offers the class an opportunity to jump through time, with a focus on the value associated with not always delivering a linear story. Students learn that it's not necessary to guide the audience or the reader through the chronology of a story for effective engagement.

The Question:

. *What is the difference between the audience responses to the narrative vs. their response to the storytelling?*

Response:

Ryan told his experience as a young man, frozen in fright, when he stood in front of a room of a thousand engineering students, receiving the top GPA honor. He wrote, "For my generation in China, we are usually the only children in our families because of China's one-child policy. Also, I didn't make friends with kids in the neighborhood because we all lived in high-rise apartments and people would just go straight back to their apartment after work or school. I was a very quiet, shy kid, and it wasn't easy to make or keep friends." In class that day, Ryan added to his narrative and offered more of his story in a natural storytelling response, "I didn't believe I would be sitting here, in this classroom, talking to all of you about my story. I used to think that only enthusiastic, friendly people were good speakers. I am quiet and shy. This is new for me. You are showing me that I can be pretty good at telling my story, too." In fact, Ryan recognized that he was an excellent storyteller and adds, "As I was telling my final story, the anxiety that usually comes with public speaking gradually faded away, because I could see the looks on the other student's faces, and could see that they were totally wowed with my story. Feeling trusted by and trusting my audience, that is how I felt. I told my story in a steady conversational pace. When I finished, I knew it was the most amazing presentation I ever made, I could see my story in their eyes." He learned, along with the class, the misleading characterization of ascribing one personality type[53] or one individual style as optimal for engaging through storytelling.

3. During class Andrea indicated, "As time goes on, every one of us in class started to wear our heart on our sleeve. I was telling a story about my confusion over my future and how I struggled among the different paths into the future." Andrea's confusion misled her to rely on a specific strategy, regardless of whether or not it was a natural fit for her story. Directly applying the images from the marketing film to tell her story didn't feel quite right, and she didn't know why.

The Question:

Where is the heart in your story?

Response:

"Growing up on a family farm, a lot was expected of my sister and me. We were

expected to not only work on the family business, but to be good at what we did. My sister was. I was not. I always hated that farm, and now that I am afraid we are going to lose it, I know how much I love it." Andrea recognized the importance of not adhering to someone else's fixed template and to be open to digging deep into the heart of the story. These internalized cues are critical for finding the courage and grit in the story and altering storytelling in the moment. Andrea got to the heart of the story. Through a conversational storytelling approach, she deeply connected with the group.

4. Student statements describing a generalized understanding about company culture may interfere with personal learning. In one case, the wish to begin a start-up story may be confused with something else. Darren's elegant demeanor and South African accent consistently engaged the class audience. Heads turned when he spoke. Yet he wasn't sounding like his confident self when he discussed his dilemma: Should I stay of should I go back home? The conflict in his story presented learning opportunities for challenging implicit acceptance of Silicon Valley[58] models in our stories and storytelling.

The Question:
Where is the conflict in your story and when did you cause that conflict?

Response:
Darren's wish to begin a start-up story contained multiple elements. He responded, "I was worried that if I shared my real vision behind my newly formed company, I would alienate some of our user base, particularly the men behind my seed funding, which my company clearly relies on to survive." As the story unraveled, the class used the SBL approach to consider the weighty issues of securing funding, the fact that a large Silicon Valley company was already willing to purchase his company, and Darren's caution around taking either a Silicon Valley offer or funding. Initially resisting, Darren, was forced to reconsider the next steps in his start-up path, and was ready to share his story and real vision with the class. He wondered aloud with the group, "Am I causing the conflict by considering both options: taking funding from the group and being purchased by a large company?"

For the four concerns, organizing questions connect the theory of ambiguity in conversational storytelling and engagement to entrepreneurial practice (Table 1). By creating small stories, reflection on the past for Jon and Ryan afforded a deeper understanding of the emotion behind their current path. Jon was afforded an opportunity to personally distinguish high levels of confidence in his understanding of the big picture definition of entrepreneurial activity by coordinating a start-up from the lower levels of confidence in his individual worries about coping with the uncertainty of personal transition. As Jon iterated on his story, conversational interactions with the audience offered an artful ambiguity for reflection on where he "should" be; audience response dispelled any misconception for Ryan that one personality type told the best story, and he

found his natural quiet, shy approach, was in fact a powerful conversational path to maximizing engagement.

A willingness to deviate from a specific strategy helped Andrea find the heart in her story, for a conversational connection to the audience that changed her view from tried and true to new and uniquely personal. Like recognizing Andrea's reliance on the marketing strategy formula, her willingness to be comfortable with ambiguity, and open to not knowing what might happen next, similarly set the conversational path for Darren to seek the strategic plot points and confront the conflict along the way of his story. Expanding the class perspective on culture and global view, Darren, helped make explicit the limitations of implicit acceptance of Silicon Valley models, for lasting personal and audience engagement.

Conversational Storytelling for New Product Creation

Implications from the SBL teaching method and specific questions/prompt fit essential concerns that are not only informative for helping new professors plan a classroom, but also help participants in early entrepreneurial work, test their claims. One must figure out the passion and iteration on the product, the new creation, and who the audience is.

Ambiguity in prompts/questions and reflective practice evokes a natural conversation to create a series of stories, easily applied in new settings. We see similar works[6, 31, 59] with results as carefully bound together with distinguishing narrative from storytelling. In this work, forming small stories[6] as responses to questions offers participants an opportunity to develop personal connections to new creation. What if all responses to questions contain a conversational storytelling theme? Aren't the best answers, whether during an interview, discussing a research project, teaching a new class, conversation starters because you are telling a story?

Participants unknowingly link the theory of storytelling to entrepreneurial practice. An artful ambiguity links the methodology storytelling to entrepreneurial practice by expressly considering the impact of four concerns: 1) The blurring of entrepreneurial level concepts with individual-level story phenomena, 2) The misleading characterization of a successful storyteller as extraverted, 3) Over-reliance on specific strategies, and 4) Implicit acceptance of current Silicon Valley models.

Implications for engineering education and future research

Both design thinking and SBL are highly context depended processes, methods, activities and mindsets[7, 62, 64, 68]. Yet the skill to share a story needs to be context-free. It is and needs to be universal. In less sky-touching words there needs to be an adequate level of both knowledge as well as a skill to craft and share an engaging story from the context chosen. The use of the method is always context depended. The method and the understanding of it need to be context-free. To achieve this goal a deeper level of skills needs to be achieved. Self-reflection and mindfulness are essential for a storyteller and

we argue that they are essential for a practicing engineer as well[48, 61]. SBL treats these "higher order thinking skills" as fundamental to engineering that is not only capable of solving engineering problems but solving the right problems in general[5, 21, 43]. This term is closely linked to innovation, which by definition needs a holistic approach to happen[9, 52]. The path from the classroom, and from the *Conversational Storytelling Engagement Concerns* shared in the previous chapter, to societal, profession-based, industry and society level abstract learning objectives is surprisingly short. It is as close as your closest student. SBL is focusing on student's knowledge, skills and self-awareness capabilities through its methodology. It is not a substitute for engineer´s disciplinary knowledge. It is part of "software" that runs the engineering skills through making the student more capable in creating and sharing her passion, vision and thoughts in a group of people. Though not listed directly in the ABET criteria[1, 16] document we believe that these qualities are part of the key skill set in creating sustainable engineering, coming up with new ventures, commitment to life long learning, and simply fostering ethical and committed individuals to the society.

Why will a Practitioner find utility in this approach?

Most of the engineering education practitioners use natural sciences and deductive methods both in their research as well as in their teaching meaning that they need to observe and present their findings in a logical and bias-free context[5, 61, 14]. This applies to both the classroom as well as the laboratory. There is very little, or no space at all, for researcher-based personal, inductive or intuitive interpretation [36, 61]. Conversational storytelling and the SBL method become engaging only when it is storyteller-based. Meaning both the teacher and the student. It is all about interpretations and emotions[13, 33]. As for engineering education this means that the method is flipping the game board of bias-free teaching[3] to begin with. But not in a way that is fuzzy, suspicious or obscure. The method, intended outcomes and the structure of the learning process are based on science and battle-proven theories, approaches, frameworks and epistemologies[13, 14, 48]. Yes, it is different and yes, it is safe, real and reliable.

In SBL the participants go through a process where they learn to leave space for interactive, continuous and intuitive reflection of the situation[3, 33, 61]. In other words they learn to tolerate ambiguity[10, 49]. This in turn leads to a more authentic and engaging communication. In education and learning outcomes this translates to a more aware and collaborative teamwork[25]. Emotions that are often linked to classroom teaching are *boredom* and *frustration*[57]. Motivating the student to pay attention to the topic in hand, which is being transmitted through a talking head, sometimes referred to as "sage on the stage" in front of the static and un-flexible classroom, is a fundamental task. Emotions that are related to storytelling are more intensive. In an attempt to engage the audience the student needs to dive into the core of her experiences, dreams, visions and emotions. To reach out and engage she has to grow inwards[23]. This creates suspension and instead of frustration and boredom, the emotions that the student needs to conquer are fear of failure, fear of shame, courage to reach out and courage to be open and sincere. The learning outcome is not only knowledge and skills in terms of engaging storytelling and about subjects related to engaging communication and collaboration, but there is also a

transformation process where the students learn more about themselves as individuals and as team members. All this means that SBL is linked to the progressive school of thought in teaching. The recent representatives of this school of thought are R. W. Emerson, C.R. Mann and J. Dewey [20, 23, 26]. If we look a bit further we see that Confucius and Socrates both used activating, inductive and emotionally engaging – holistic learning methods in their teaching[8, 66]. Whether progressive school of thought will ever become mainstream is not in the scope of this study or article. For an engineering educator and engineering education researcher who shares the goal of student-centered education, this does pose an interesting question.

Surprisingly enough this is also one of the caveats of the SBL method. For the method to work the practitioner does not have to unveil her core emotions. But she has to commit to methods, for example constructive feedback, and show professionalism when the students share engaging and powerful emotions through their stories. You will never exactly know what will happen. If you would, where is the ambiguity and inductiveness? The storytelling-based method is a method that will span the boundaries of the practitioner as well. It is to be shared with everyone. Yet to excel at it, commitment is expected.

Recent research in new product development and design thinking start with the assumption, well proven by science that multicultural and multidisciplinary teams are a good combination and a way to achieve innovations [27, 35, 52]. We acknowledge the difficulty concerning the word innovation, which can be defined to mean almost "anything that is awesome" [44, 45]. We define innovation as something new, whether a product or service that provide added value to the stakeholders[27]. The shared surface boundary between design thinking and product development processes is partly in the methods and activities area, leading to innovation and the storytelling-based method. The core linkage is, however, in the area of shared mindset. Design thinking school of thought propagates the mindset of "paying it forward," which is seen to work well in disruptive processes leading to radical innovations[44, 45, 49]. These highly ambiguous processes focus on multidisciplinary teamwork in order to cross-pollinate ideas and approaches[44, 45]. One of the key challenges is how the different individuals and the team as a whole are able to communicate their message and ideas inside the team and to different stakeholders[62, 64]. This is where conversational storytelling and the SBL method come into play. We believe that storytelling-based learning and conversational storytelling are an integral part of the design thinking process firstly as a way of communicating sustainable innovations and also as a method for shedding light on the latent and undiscovered needs that the innovations are designed and implemented to solve.

The abovementioned also depict the main challenges and opportunities for future research. Storytelling-based learning method is closely linked to new product development and especially to design thinking mindset and activities. In the design thinking process storytelling is used to give a personality, find the persona for the potential "user" or it can also be a "story" behind a product[44, 45]. It is an excellent tool for discovering needs and sharing those with the team and other stakeholders. In addition to these well-established roles, we see SBL also as a powerful tool for both the individual

and the team to become high performing and more mindful when achieving their new product development, entrepreneurial goals.

Another research challenge is the SBL method as an independent course that can be used in multiple curricular settings. This means that SBL, in the classroom context of conversational storytelling, is seen as a transferable working life skill for an engineering graduate. The main focus here is answering a two-part question: How can conversational storytelling (within SBL) be utilized by a committed and engaged engineering practitioner in her classroom? How will parallels to the inspirational early phase of an entrepreneurial venture inform classroom teaching from a student perspective? Further work will consider the student perspective on conversational storytelling to inform the engineering practitioner - new professor and company founder alike - to figure out the passion and iteration on the product, the new creation, and who the audience is.

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