

One-Liners: Two Case Studies of Flow and Futility

Kevin H. Brockberg

In order to explore the significance of Vygotsky's zone of proximal development, two case studies are presented. The initial study reveals the positive contribution of teacher scaffolding in what reflects Csikszentmihalyi's construct of flow. The second case recounts a negative instance of learning, leading to a conceptualization of futility as an adjunct to flow.

"I just don't know what to *do!*" exclaims one student in a classroom. "I *just* don't know what to do!" groans another. These very same words are worlds apart in their tone and, more significantly, their meanings. In this first instance, the student, while uncertain of direction, is primed for action. Alternatively, motivation to accomplish a task is virtually extinguished in the second articulation. More than likely you have heard these words uttered before, or have even spoken them yourself. What prompts such ranging expressions from learners?

As a doctoral student, surely I could summon some factors from my learning theories repertoire and coursework to make sense of what leads to these kinds of expressions from students. Yet, I know that in the past three decades since Gagne (1977) introduced nine essential events of instruction, contemporary analysis now recognizes nine categories of research-based instructional strategies (Marzano, Pickering, & Pollack, 2001)! The teacher (or one's teaching) is still at the center, not directing research, but as the object of research. To truly understand the significance of statements such as these leading expressions, I know that when I take that quantum leap beyond education's defaulting penchant toward teaching, and place *students* as objects at the center of *learning* theory, I am establishing a bias (Creswell, 2003) toward the penultimate role of the teacher in learning.

Foundational to learning, as these case studies underscore, are students' perceptions of their interactions with teachers (Daniels & Perry, 2002; Erwin & Brown, 2003; Fisher, 2003; LaGuardia & Ryan,

2002; Marzano & Marzano, 2003), which are pivotal factors in motivation and eventual academic success (Howse, Lange, Farran, & Boyles, 2003). At issue is the challenge for teaching which “involves jump-starting the self-regulation dynamic” (Martin et al., 2003, p. 431) for students, of shifting an understanding of the locus of motivation to the learner. Understanding the instructor’s behaviors through the methodology of case studies and how two students launched into their own self-initiated quests for satisfaction can be best attained through a conversation with the learners themselves.

As a backdrop to student experience, I summon Vygotsky’s (1986) conception of learning.

Vygotsky believed that the outward, interpsychological relations become the inner, intrapsychological mental functions. ... The principal steps in this remodeling include the transition from overt dialogue to internal dialogue ... [which are at] the forefront of Vygotsky’s theory (Kozulin, 1986, p. xxxvi).

In other words, “development occurs first between people, then within the individual. Individuals then actively transform what they have realized through interactions with others” (Wink & Putney, 2002, p. 62). As a student engages in the design and features of instruction, in Vygotskyian terms, an individual mentally converts the image or requirements of the assignment from the teacher into a plan or an approach to complete or master the task.

The zone of proximal development is one of the central tenets of learning identified by Vygotsky. The zone is what Johns-Steiner and Souberman describe as the site of this transformation from the interpersonal beginning to the intrapersonal formation of meaning (in Wink & Putney, 2002). Within this dynamic of delicate interplay a teacher erects what Wood, Bruner, and Ross metaphorically term a scaffold of interaction, “the essence [of which] ... is the continual revision of the level of assistance in response to the child’s advancement ... [whereby] the learner gradually becomes directly responsible for producing the expected behaviors” (in Grigorenko, 1998, p. 214). The scaffolding is progressively withdrawn as learning becomes more and more intrapersonally meaningful and significant.

The scaffolding concept aligns with the Russian vocabulary of Vygotsky: *obrazovanie*, “image-making” as a process of forming by outer, social-cultural forces (as an ocean carves and contours a beachhead); and *obuchenie*, an interchangeable term for the activity of both teachers and students, reciprocal in nature (Wink & Putney, 2002). Regarding Erika’s plate, features of scaffolding correspond to the concepts of *obrazovanie* and *obuchenie*.

Strongly agreeing that “contemporary theory construction and revision are guided by meticulous analyses of thought and behavior” (Mussen, 1992, p. xii), I think it is possible to recount what has happened within learners by asking pointed, probing questions through structured interviews. Interviews get to the purpose of teaching, the learner. Interviews offer a different genesis or varied “perspectives” (Hoban, 2000, p. 134) of classroom events. Interviews are a “means for exploring and gathering experiential narrative material that may serve as a resource for developing a richer and deeper understanding of a human phenomenon” (van Manen, 1990, p. 66). Through interviews I have indeed been able to revise and construct a theory of learning, complementing the suppositions of Vygotsky and the elusive meaning of his zone of proximal development.

Case Study Strategy

I opted to select a case study strategy, incorporating this methodology of interviewing, seeking an empirical inquiry to investigate “a contemporary phenomenon [Vygotsky’s zone of proximal development] within its real-life context” (Yin, 1994, p. 13). A case study perspective would permit me to circumnavigate the zone of proximal development, solely “grounded in information from participants” (Creswell, 2003, p. 133). I knew selecting cases afforded a distinctive opportunity to learn (Stake, 2005, p. 452) from those who were learning in a classroom. Although I already knew the participants to interview, I had to first examine myself in my role as researcher before I could begin the research process.

Conforming my research to the qualitative process directed me to consider myself as a “gendered, multiculturally situated researcher [who] approaches the world with a set of ideas, a framework that specifies a set of questions” (Denzin & Lincoln, 2005, p. 21) with my

intended methodology of interviewing. I had to understand that interviewing as “indirect information is filtered through the views of the interviewees” (Creswell, 2003, p. 186). I had to admit that my presence could potentially bias the participants’ responses and that “a case study involves an inference every time an event cannot be directly observed” (Yin, 1994, p. 35). These inherent weaknesses in the methodology of interviewing must be reconciled in my careful analysis of the ensuing dialogue.

Having already established my bias for placing students at the center of research cleared the way for an “open and honest narrative” to proceed (Creswell, 2003, p. 196). Other judicious steps I would take toward building a case for credibility in this qualitative process included member checking (Lincoln & Guba, 1985); the presentation of thick, rich descriptions and the debriefing of participants leading to results (Creswell, 2003); and a negative case analysis and referential adequacy (Stringer, 2004). Member checking invites the participants to review (and revise, if necessary) the final draft of the analysis. Thick description and debriefing naturally convey feelings and findings, thereby reducing the degree of inference the researcher tends to generate in the absence of these validating techniques. A negative case will prompt counterintuitive thought, while the use of terminology generated by the participants in the interviews provides for referential adequacy in the analysis. The application of these measures preserves “what the participant has begun to share” (Seidman, 1991, p. 59) in the final analysis of the research.

Two Cases

Erika attends a public high school in the suburbs of a major Midwestern city. She expresses interest in gaining a college degree, and understands the importance of achievement and performance during her high school years. Erika is involved in extracurricular activities at school and in the community. She harbors vivid memories of a particular experience in school, and shared her recollections of the learning process during a recent interview.

Ceramics is an art form that Erika truly enjoys. She had enrolled in an advanced class and had refined some of her elementary techniques in her junior year in high school. As a culminating project, she was

assigned to use a mold to construct a plate with a detailed edge. The plate was to have an etching which would become, with a special glazing technique, the primary feature and focus of the work of art. Once the task was presented to the class, the process of crafting the final project commenced.

Joel attends the same public high school as Erika. He also has plans to attend college and is intent on achieving the grades necessary to enroll. As is Erika, Joel is involved in extracurricular activities at school and in the community. He, too, shared his recollections of a learning experience during a recent interview.

In the summer preceding his sophomore year, Joel was assigned to read four classic novels. Assignments in his honors literature class would capitalize on the extra readings which time would not afford during the school year. Joel, a motivated reader, read his novels as assigned.

An Outline for Conversation

To recount the many facets of learning in these two cases, I composed a set of questions to ask both subjects. To meet my purposes, I framed the dialogue as an experiential investigation in Table 1. Experiential methodology, or debriefing (Rohnke & Butler, 1995), leads an individual through reflective and sequential questions about the event or issue (what happened?), to what was significant about the matter or matters (so what?), and finally to determine a practical, future-oriented application (now what?). Debriefing avoids “leading questions” which can “influence the direction the response will take” (Seidman, 1991, p. 62). Nonleading questions permit “reconstruction” of the past and “projection” into the future (Lincoln & Guba, 1985, p. 268). The specific questions listed in Table 1 allowed Erika and Joel to freely examine what occurred, to reflect upon the significance of intervening factors, and finally to project possible meanings and applications for their future learning.

In each case, Erika’s and Joel’s teachers designed learning experiences to capitalize on each student’s skills, challenging each to gain new insights from the assignments. The construct of flow is an attempt to describe the intersection of the learners’ skill and the challenge of the task (Csikszentmihalyi, 1997). Flow subjectively

expresses a learner's or a performer's degree of engagement with, or depth of absorption in, a task and also addresses the powerful emotions of anxiety (when a task is too challenging) and boredom (when skills exceed demands) that can lead to disengagement. Again, being careful to avoid manipulating the participant responses, aspects of Csikszentmihalyi's theory of flow were also woven into the experiential outline of questions in Table 1 to gauge the degree of captivation or flow Erika and Joel experienced.

Table 1. *Experiential Learning Questions for Reflection*

Sequence	Question
What Happened?	<ul style="list-style-type: none"> - Analyze the problem or assignment. - How did you feel as the problem or assignment was presented? - What was the challenge in the assignment? - To what degree do you think your skills were sufficiently developed to tackle this task?
So What?	<ul style="list-style-type: none"> - How did you feel about yourself as the project unfolded? - Did you ever feel bored or anxious? - Did you ever feel as though something or someone held you back? - Did you ever feel as though something or someone spurred you along? - In what ways did your teacher assist or help you judge your planning and/or crafting? Other adults? Your peers?
Now What?	<ul style="list-style-type: none"> - What conclusions can/did you draw about your performance? - Based upon your performance, what did you learn about the subject of ____? About creating or understanding something within the subject of ____? About yourself? - What would it be like if you started another project of this nature? - Overall, what impressions do you hold about this project, the process, and the result?

Note. The intent behind this series of questions is to reveal (not manipulate or influence) student perceptions of a learning experience and the aspects of Csikszentmihalyi's theory of flow.

Alignment: Erika's Case

The opening statement of this presentation, "I don't know what to *do*," succinctly characterizes Erika's experience. Significant aspects of Vygotsky's zone of proximal development emerged as Erika shared her story with me. She willingly consented to my request for an interview.

What Happened?

Initially the instructor explained the project to the students. The plate or bowl was to be formed in a mold, with a detailed edge. Using a new glazing technique, an etching was imbedded into the surface of the bowl which, upon completion, would command a viewer's attention. Some completed projects from previous students were displayed to visually demonstrate the requirements of the assignment.

Erika was "not impressed" by the simple etchings in the samples of student work. In her mind, the projects were "rejects"; the best productions would have been taken home by students, not left behind for the teacher's use. These substandard examples left Erika with the uneasy reckoning that she really was "not looking forward" to working on the task that seemed so ordinary.

The challenge for Erika was deciding on the etching for the plate. Previous work in the studio had honed the skills necessary to mold a plate, detail an edge, and meet the requirements of the assignment. She knew that she wanted her plate to "look different" from the others she had seen. This decision was a monumental obstacle to overcome, and the length of time it took for Erika to arrive at some unique approach made the challenge increasingly formidable. In her words, "I had to figure out different ways of doing it. That was the hardest part." Then she discovered a book from the family library, *Picasso's One-Liners* (Galassi, 1997), and realized that she could imbed her own one-liner into the clay and craft an expression unlike any of the examples she had seen. She was now "excited" and ready to begin her project.

So What?

As the project unfolded, Erika knew she could create a “cool” plate; she had both the prerequisite skill and now a creative idea to complete the project in a manner which would be personally pleasing. The process of transposing the one-liner to the plate was admittedly tedious. Yet knowing that her project would “look cooler” helped her persist. Her teacher expressed her own excitement as the project progressed, and soon other students came to see Erika’s etching. Picasso was an “inspiration” to Erika and her classmates.

Erika proceeded with the project “pretty much” on her own, and never had to ask for help from her teacher, although she noted that had she sought help, her teacher would have willingly complied. While she recognized some positive feedback from her peers, their comments didn’t influence her work to any great degree; in her mind she already knew “exactly what I wanted to do” and diligently applied her skills to the task. Erika was now eager to finish the plate project.

Now What?

The project was finally glazed and fired. It was placed in one of the school display cases in the main hallway, and then the plate was selected for a student art exhibit at a local mall. Even before all of this attention, Erika knew that she had created a “satisfying” work of art.

Erika felt “proud” of the piece and would be excited to work in clay again. She particularly enjoyed combining drawing with ceramics. While the design and crafting took a great deal of time, she really liked the way the colors in the glazing turned out and felt that all of the effort was “worth it.”

The Role of the Instructor in a Learner-Centered Philosophy

In a learner-centered philosophy, the teacher still remains a significant factor in the growth and change within the student. Marzano and Marzano advocated “appropriate dominance” of the learning process (2003, p. 7), whereby direction is carefully calculated and applied by the teacher. It is this “teacher modeling and care-giving” (Wentzel, 2002, p. 288) that motivates students to achieve; indeed, findings show that perceived support from teachers is a significant

predictor of students' perceived competence, motivation, and academic achievement (Wong, Wiest, & Cusick, 2002). In Erika's case, the teacher appropriately set forth a challenge, assisted, and suggested changes throughout her interaction with students. Erika felt her teacher never interfered, allowing her to proceed independently under appropriate supervision and unrestricting scaffolding. Her work was uninhibited by the teacher.

What, however, happens when a teacher short-circuits or fails the essentials of planning, support, and relatedness? What results when the learner is not facilitated toward flow? How is learning thwarted, leading students along a path toward despondency and/or frustration? It is all well and good when model instruction results in projected success. Yet, as Illeris (2003) cautioned, a viable theory of learning should also account for those instances when learning encounters obstacles and results in impasses. What about those cases where learning is all but futile?

Misalignment: Joel's Case

Joel's negative experience with his school project might be summarized by the opening statement, "I *just* don't know what to do." To complement the understanding of Erika's positive intrapersonal experience, I sought a case by which to explore the opposite end of the spectrum and examine a situation where the scaffolding was weak, the interpersonal dimension was minimal, and when little *obuchenie* occurred between the teacher and the student. I attempted to discover, through a learner's perspective, the aspects of learning where skill and challenge are not great, exploring the lower reaches of Csikszentmihalyi's theory of flow. As with Erika, Joel consented to a confidential interview.

What Happened?

With two weeks remaining in his sophomore year, Joel received the first and only assignment based upon those summer readings. A block format, eight-paragraph character analysis was to present an engaging introduction, a strong thesis, contextually based evidence, six quotes supporting assertions, and a conclusion which proposed

further study and reflection of the novel. Joel understood two matters very well: the requirements of the assignment, which would contribute a “significant percent” of his quarter grade, and the “ridiculous” requirement to recall specific details from a novel he had read 10 months earlier. Joel felt “angry.”

I continued to ask Joel to share more of his experience with the line of questioning from Table 1. The greatest challenge Joel faced was to recall information from “so long ago” and to put together complete thoughts about character traits and flaws. Compounding the matter was the fact that no background or previous knowledge from such character studies had been presented in class during the year. Joel knew he had the skills to analyze and write, yet without any examples or previous practice, he felt completely “unprepared” to write a character analysis.

So What?

As the project unfolded, Joel felt increasingly “annoyed.” He knew he would have to read the novel again if he was going to get a good grade. He was “fed up” with the teacher and the project, and in his frustration he simply wanted to “get it over with.” The “last-minute” assignment, the short time interval before the due date, the complete lack of “in-class time” for work on the assignment (another in-class project was due on the same date), and lack of support all held him back from doing his best work. In his view, the teacher had not planned very well, and the students “suffered” for it.

Now What?

What Joel learned from the experience was “hard to say.” He got a “half-decent grade of 81” without trying too hard. He explained that would be “acceptable” to his parents. He knew that there was “nothing new” he had learned about characters and traits, and the graded project was returned without any discussion or remarks from the teacher. Joel explained he had not lost his “love of reading,” though he “probably won’t” read the summer assignments in the coming year. He strongly felt there was no positive result from the assignment, and in his words, “no learning” occurred. All in all, Joel expressed this as “pointless,” an exercise in futility.

Flow and Futility

As I interviewed Joel for balance and creditability as a negative case analysis (Stringer, 2004), it became evident that while the questions I had crafted in Table 1 did adequately help to recount the sequence of events and the resultant feelings and dispositions, the construct of flow that I had blended into the query didn't coincide with his experience. Obviously flow did not result in Joel's case. Yet the assumption in Csikszentmihalyi's theory—that feelings of anxiety or boredom would arise if the challenge was either too great or too menial, overriding the possibility of flow—did not in any way depict what Joel had related to me. It seemed to me that a reversal or backwash of flow resulted in frustration and despondency for Joel, not boredom or anxiety.

With an absence of scaffolding in the zone of proximal development, Joel was unable to write deeply and extensively about character traits and flaws. Without a clear understanding, or a coherent explanation of the teacher's intent, Joel felt downcast and despondent and could not or would not muster the initiative to attain the deeper reaches of literary analysis. While flow seemed to aptly characterize Erika's self-absorption, would a new model have to be devised to capture Joel's experience? While Erika's efforts seemed "auto-telic" (Csikszentmihalyi, 1997, p. 43) in that she reached a self-goal, might Joel's experience be expressed as a-telic, or goal-absent?

As I contemplated the spectrum of their vastly different experiences, I sensed that Csikszentmihalyi had literally and figuratively *cornered* one aspect of experience, the positive nature of flow. I hypothesized that a negative feature of flow might well occupy a negative quadrant of experience, and I conceptualized this experience as futility in Figure 1. Futility is the bland result of the purposelessness Joel held in his perceptions about the teacher ("she is mean") and the result ("no learning"). Joel experienced the other side of flow, which inhabits an altogether different context of learning experience.

Superseding the continuum of skill, an understanding of purpose must be acquired by the learner; therefore, in the negative quadrant, the continuum of coherence runs across the axis. The less coherent (increasingly negative along the axis), the greater is the resulting despondency. Alternatively, the zone of proximal development that demands a supporting role in learning is represented as a continuum

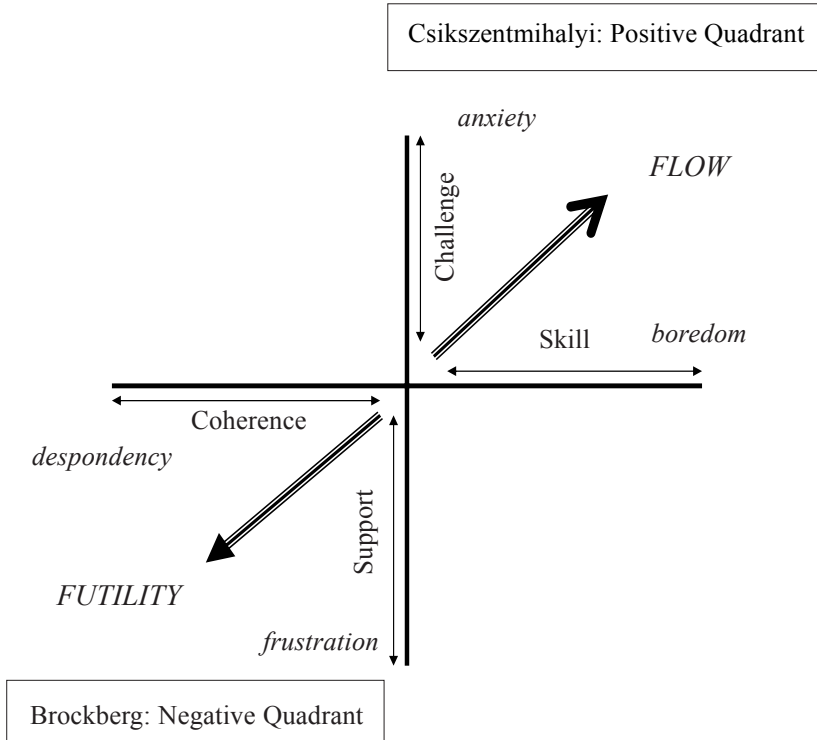


Figure 1. The Negative Quadrant: Regression from Flow to Futility

Note: The Positive Quadrant is from "Flow and Evolution," by M. Csikszentmihalyi, 1997, *The NAMTA Journal*, 22, p. 41. Copyright 1997 by the NAMTA Journal. Reprinted with permission of the author. The Negative Quadrant is designed by the author.

of support. With waning support, the learner succumbs to greater and greater frustration. Whereas in Csikszentmihalyi's quadrant positive flow results when skill auto-telically meets challenge, in the negative quadrant frustration and despondency combine a-telically and futility reigns while learning fades toward purposelessness and eventual extinction. While still quite hypothetical and subjectively based upon this one case, the negative quadrant of futility is clearly reflective of what Joel experienced. It should be noted that the theory of flow is also a supposition of learning experience advanced by Csikszentmihalyi.

Flow by itself does not seem to express the gamut of learning from those occasions of self-absorbed success to those unfortunate instances of wasted opportunity. Lines of futility in concert with flow can conjointly account for the wide range of meaningfulness and pointlessness in a learning experience.

Conclusions

In this research, the role of the teacher has been presented as a penultimate catalyst to learning; it is the learner himself or herself who is central to cultivating purpose and catalyzing or processing the pursuit of success. Tactfully understanding the roles of teacher and learner in what Vygotsky phrased as the zone of proximal development is a paramount consideration of a working, useful theory of learning. The positive quadrant of Csikszentmihalyi and the negative quadrant proposed by the author both aptly recount the learning experiences of Erika and Joel as they moved beyond interpersonal understandings to intrapersonal pathways.

The relationship of the teacher and learner, and the intersection of skill and challenge, fuel a student's sense of purpose and eventual success. Support and coherence, by way of counterexample from the negative quadrant of futility in Joel's case, are foundational to the teacher-learner relationship; learning, according to Vygotsky, begins interpersonally, and without support and coherence, Joel's opinion of, and his relationship with, his teacher was negative ("she is mean"). Despite this instrumental, penultimate role of the teacher, empirical literature on this relational scaffolding seems to be "relatively sparse" (Bigelow & Zhou, 2001, p. 75). Teacher influence in the dynamic of student motivation has not been examined to the extent that parental influence on child motivation has been (Wentzel, 2002). Of all of the facets of the teaching-learning process, motivation is that most intricate feature still beckoning our understanding with further study.

The role parents play along these lines of flow and futility should be explored. Glimpses into the parental factor in motivation are evident in Erika's discovery of *Picasso's One-Liners* and Joel's satisfaction with his grade. Parental expectations and parental involvement (Gonzalez-Pienda et al., 2002) influence goals which are embedded within the parent-child relationship (Bigelow & Zhou, 2001).

Goals are inherent in a child's sense of purpose, meaning, and self-determination. The role of parents in a conceptualization of scaffolding is suggested for further research into student performance.

For education to actualize a learner-centered renaissance, learning processes rather than results must be comprehensively examined. The learner himself or herself can provide clear, conclusive insights, far superior to numerical ambiguities and their presumptive pedagogical prescriptions which are far too prevalent in our contemporary conceptualizations of student performance. This initial, brief study recounts the experiences of two students and their recollections of teacher practice as a backdrop to their school performances. The interviews served as occasions for "viewing teaching practice from different perspectives and seeking new ways of thinking about classroom instruction" (Hoban, 2000, p. 134).

Qualitative experts recognize the important role of theory in contemporary research (Creswell, 2003; Yin, 1994). Cases do indeed underscore the utility of theory. Yin cites the work of Campbell's "pattern matching" as a primary approach to case studies ... whereby several pieces of information from the same case may be related to some theoretical proposition" (p. 25). In the cases of Erika and Joel, the zone of proximal development figured predominantly in the patterns of both the positive experience and the negative case. In striving for enhanced credibility with the vanguard of a negative case, the emerging theme of futility surfaced.

With ensured credibility (through member checking, thick description, the clarified bias of the researcher, a negative case analysis, debriefing, and peer review) the illustrative features of the zone of proximal development and the emergent adjunct of futility to the theory of flow appear as valid explanations for relationships between teachers and students across the spectrum of learning. Yet, case studies are limited, serving "to optimize understandings of the case rather than to generalize beyond it" (Stake, 2005, p. 443). The understandings prevail best as a "vehicle for examining other cases" (Yin, 1994, p. 37).

I offer a revised series of experiential, reflective questions for probing student perceptions of teacher behavior aligned with scaffolding and the Vygotskyian zone in Figure 2. This line of inquiry is submitted as a means to place students in the center of the endeavor to improve performance. As the questions probe deeply into the process of learning

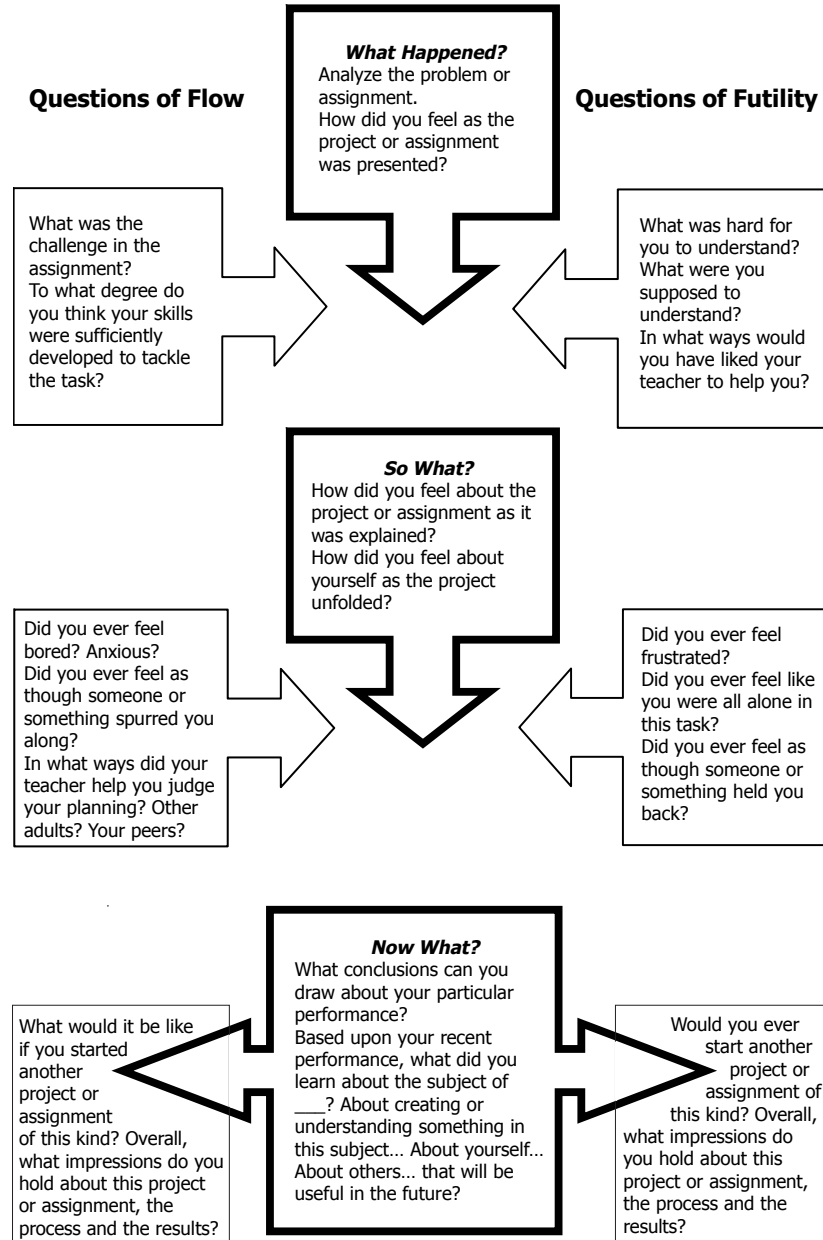


Figure 2. Experiential Questions Probing Flow or Futility

and the relationship between the teacher and student, responses can be freed of emotional attachment or feared consequence if a third party conducts the interviews as I had for Erika and Joel. Following this sequence of questions and prospecting the branching veins of either flow or futility will aid inquirers in mapping zones of proximal development, giving definition to what is in essence elusive and intangible. With a zone characterized by student feedback, appropriate scaffolding can be erected to support and catalyze the flow of student learning and achievement. These questions are a starting point for action research into aspects of flow and futility.

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Kevin H. Brockberg is a doctoral student in Educational Leadership at Oakland University in Rochester, Michigan. He believes conversation lends significant insight into learning theory and effective school cultures, his primary research and leadership interests.