Opus 42: Agency as Education's Great Imperative

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What is it like to be intrinsically motivated? This is a different question than what it means to be intrinsically motivated, although the two are conceptually linked. In contemporary psychology there has been a roughly accepted meaning for the term. Deci and Ryan's self-determination theory, which appears to be one of the more well-articulated expositions of intrinsic motivation, defines intrinsic motivation as engaging in an activity for the enjoyment or pleasure it brings, or to engage in an activity for its own sake.[1]

Their formulation of intrinsic motivation has been built upon a programme of research involving experiments and surveys of people in a variety of settings and tasks, and whose results have important implications for the human endeavour. Intrinsic motivation has been associated with well-being, life satisfaction and happiness, cognitive development, cognitive engagement and achievement, and healthy development.

However, Deci and Ryan[2] have tended to use experimental designs with contrived tasks (such as solving anagrams), or correlational designs with participants in settings such as classrooms, and in many instances, operationally define intrinsic motivation as how interesting participants found the activity to be (which is odd, because interest was not something they included in their definition of intrinsic motivation). In such instances, can the participants be said to be truly intrinsically motivated? At the same time, their research has never really explicated the experience of being intrinsically motivated. What is it like to be intrinsically motivated?

Conceptualizations of intrinsic motivation will eventually intersect with discussions of flow[3], a subjective experience in which the individual becomes wholly immersed in the activity to the point that attention is directed solely to the task at hand; execution seems effortless, time seems to pass faster or slower than normal and there is a loss of self-consciousness. Consciousness and action become blended and there is a deep and enduring satisfaction from engagement. In sport, it is referred to as "being in the zone" and musicians recognize it as "being one with the music."

If we consider flow to be the pinnacle of an intrinsically motivated experience, the research on flow provides some insights into being intrinsically motivated. Several studies have provided descriptions of flow experiences, articulating the subjective elements of the phenomenon (see Seifert & Hedderson, under review). Yet, the relationship between flow and intrinsic motivation is not well-delineated, either conceptually or empirically.

Rather than using contrived tasks to better understand intrinsic motivation, it seems sensible to examine individuals engaging in a freely chosen activity in a spontaneous, natural setting. What might such individuals tell us about the experience of being intrinsically motivated, and what psychological constructs underlie intrinsic motivation?

I began this project with an examination of the experiences of skateboarders.[4] Skateboarding is an activity that seems to be inherently intrinsically motivated, and data collected last summer support this claim. There are no rules; there is no formal structure, no instruction or coaching, no practices or drills. There is minimal social interaction. It is, for the most part, self-directed. Skateboarders set their own goals, choose their tricks and plan their execution. They do not compete against each other, and they are not evaluated in any formal way (except for the occasional competition they may register for). They do not do it because they are pressured or to impress others.

This was followed by interviews with musicians and students who enjoy mathematics. These two groups are interesting because they are engaging in activities which have potential for flow episodes. Musicians speak of being one with the music, and math problem-solvers can become engrossed in a problem. Yet, the environments in which they function can be competitive, evaluative, structured, and constraining. They may have little choice in the activities they engage in: they have lessons to attend, practice to participate in and homework to complete. In the case of musicians, they also must perform publicly. Under such conditions, how do they maintain a sense of intrinsic motivation and achieve flow?

So why do skateboarders do what they do, and what is the experience like? Ethnography was chosen as the means to study skateboarders. They were observed and interviewed over the course of a fall and summer, with more than twenty interviews being conducted. Observations indicate that skateboarding is an activity characterized by mastery goal pursuit – the desire to master a new trick. Within the activity there is a cycle of varying levels of frustration, followed by a dogged persistence and expressions of elation with success. For example, consider M.:

> I watched closely as one particular skateboarder was continually attempting an ollie off the flat green box. It appeared that he was having some minor difficulties with the kick-off … with each consecutive try, it seemed as if his kick-off was improving … on the fifth attempt his foot was directly in the middle of the skateboard and he landed the stunt successfully. He yelled, “Oh yeah, baby,” smiled, and started jumping up and down in the air [Observations of M].

But what underlies this cycle and sustains their motivation? What is it that makes this activity so enjoyable? Skateboarders do what they do because of the subjective experience that is inherent in the activity. The most prominent reasons given for their enjoyment of the activity were the sense of freedom and independence they feel, the challenge, and the emotions that accompany successful execution of a trick.

When they are skateboarding, skateboarders feel free. They are free to do as they please, to choose what tricks they try or don't try. There are no adults telling them what to do and no rules to follow. They are free from stress and worry:

> I just feel so carefree whenever I am skateboarding. I feel free! I feel free of parents, teachers, people in general … I just enjoy my freedom and like to express that through skateboarding … I actually feel in control of what I do … I can pretty much do what I want. I feel that I am in charge [M].

But they also did it because of the challenges it presented, and the immense satisfaction that came with accomplishment:

> It is so thrilling when you finally nail a stunt ... finally nailing a stunt that you may have tried 30 times to get [A].

Skateboarders were asked to describe what it was like to be in the zone, to experience flow. For them, being in the zone was "a feeling you get inside yourself" [A] that was actively pursued. The experience was characterized by several important qualities. One is an intense subjective experience of euphoria, emancipation and efficacy. They described it in such terms as being addictive, a rush, a natural high that made them feel alive:

> Wow! That is what it is like … wow! There is nothing that I have ever done in this world that has made me feel this way ... You just feel good all over, especially inside … it's an unreal feeling [J].

It also left them feeling liberated from stress and pressure as though the cares of the world had been lifted from them, with elevated levels of confidence that bordered on invincibility:

> It's like you are flying, flying around the park on your skateboard. You feel like nothing can ever stop you … the skateboard is part of your body. You just feel so free, and unstoppable … you feel so alive [J].

But being in the zone also assumed a transcendental quality in which skateboarders became disconnected from their surroundings, feeling separate from the world. They felt like they were being transported to another place:

> In the zone is like you are in a different world all together. It's not like you are in this world at all. You just feel away. You feel far away from everything and everyone else. …. You are so carried away with the skateboarding [A].

This transcendental feeling may be a result of concentration and absorption in the activity, a third characteristic of being in the zone. For some, this concentration leads to a singlepointedness with the only thing they were thinking was their trick in the present moment:

> It's hard to describe, but it is almost like you are so completely wrapped up in what you are doing that your mind shuts itself off from anything else [A].

The experiences of musicians and mathematicians are similar to those of skateboarders.[5] Confronting challenge and the feelings of satisfaction that come with success were primary reasons for enjoying the topic, as were other positive emotions experienced. For example, some musicians felt at peace while making music, while math students reported that "working out a solution is a rush." However, there were two important differences. Musicians stated they enjoyed making music because it was a means of expressing themselves. Making music was an extension of who they were and was part of their identity. Students who enjoyed mathematics consistently referred to the nature of the discipline as a source of their enjoyment[6]. Mathematics was an activity in which there was a right answer, rules and procedures to follow, and something to which they could bring their knowledge and skill to bear.

Like skateboarders, music and math students described experiencing flow as peak performance, an uplifting emotional experience, and as having a transcendental quality. Not only did they perform at a high level, they experienced intense positive emotions and an element of transcendence in which they felt disconnected from the world as they became wrapped up in the activity.

Researchers of flow theory have consistently maintained that flow occurs when there is an optimal match between challenge and skills. Responses from math students were consistent with this position. They reported experiencing deeper concentration when problems were complex and multi-step, something that was long and complicated with multiple solutions that made them really think. Routine problems or problems beyond their skills did not result in flow.

Yet, it is apparent that while a challenge-skill balance might be a necessary condition, it is insufficient to produce flow. Even if the difficulty of a task is within the capabilities of an individual, the individual must believe that he or she is capable of successfully completing the task. But, if students' sense of self-worth

is contingent upon being perceived as capable, then challenging tasks will be a threat to their self-worth and they will utilize strategies to protect self-worth.
Some researchers have reported evidence suggesting that a preoccupation with self and self-worth will inhibit flow. Arguing from a self-objectification theory position, they have suggested that concerns with self, such as worrying about body image, occupy consciousness and inhibit flow. Using data collected last summer from skateboarders, I was able to identify skateboarders who could be classified as failure avoidant, that is having a preoccupation with ability perceptions, and those who were not. Likewise, using latent profile analysis I identified two patterns of flow experience – those who reported a transcendental quality and those who did not. Of those students who experienced a transcendental quality to their flow experience, 95% were not failure avoidant. Skateboarders who had a preoccupation with ability perceptions did not report this transcendental quality to their flow experience.

Yet, is failure avoidance necessarily an obstacle to flow? In the course of her search for interviewees, Christa encountered two skateboarders who we shall call Tom and Jerry. Tom was a boy whom she met in one of the local skateboarding parks whose behaviour was different than that of the other skateboarders:

> … except this one skateboarder who stayed by the quarter pipe … He sat next to the quarter pipe and watched the members of his group skate about the park. He sat for quite some time (15 minutes) until I noticed him stand up and get on his skateboard. Periodically, his friends would skate by the quarter pipe and [encourage him] … [He started] attempting a trick off to the side of the quarter pipe … He picked up speed on the skateboard … he was about to jump, and did jump somewhat, but the skateboard slid from under him … he fell to the ground. He got up on his feet, ran after his skateboard, started walking slowly back to where he was previously sitting. He sat there for another 15 minutes before he stood up again [Observations of Tom].

Eventually Tom went behind the quarter pipe, out of view, and tried his trick and did not succeed. When his friends noticed, he commented on how lousy his board was. By his own admission, Tom was not very skilled. He did not try hard in front of others because he did not want to look foolish and was concerned about negative comments that might be made.

Jerry was a skateboarder who was discovered in a quiet cul-de-sac. There was a small group of boys who had set up a small ramp in the middle of the cul-de-sac with a small wooden box near by. While the boys were flying around the cul-de-sac, up and down the ramp, there was one boy who was off to the side, by himself, whose behaviours were different than the others. Like Tom, Jerry expressed very little confidence in his abilities:

> I notice that one boy is rather quiet. He is not yelling out when he lands a stunt. Furthermore, he is not encouraging his fellow skateboarders on … In addition, he is not skateboarding that much. During the time that I watched him, he only skateboarded off the ramp twice. In contrast, his fellow peers may have skateboarded off the ramp up to 20 times in a 45 minute period. The first time this boy skateboarded off the ramp he fell … As he fell the other skateboarders laughed at him. The boy stood up, picked up his skateboard … and stood and watched the other skateboarders. Around 15 minutes or so passed before the boy placed his skateboard back on the ground. Another 5 minutes or so passed before he stood on his skateboard and began skating slowly around the cul-de-sac. … The entire time he was skateboarding slow. He did not speak, laugh, smile or look up and around while he was doing this … At one point, he attempted the ramp for the second try… he landed on his backside. … One of the skateboarders stopped, pointed at him and started laughing. He let out a small giggle and said, "Yeah, I know. I suck!" [Observations of Jerry].

Although they had little skill, and were preoccupied with ability perceptions, Tom and Jerry were able to talk about flow experiences. They knew what it was like to be the zone. Jerry reported that he enjoyed learning new tricks, felt satisfaction from his accomplishments and the autonomy he experienced was one of the things that made skateboarding enjoyable. He had been in the zone a few times in the past and that the experience was euphoric. Tom stated that feelings of control and autonomy were important to him. While being in the zone he was focused, concentrating hard, would lose track of time, and was able to describe the transcendental quality of flow.

Although Csikszentmihalyi[7] contends that a challenge-skill balance produces flow, it seems to me that something else is needed to support flow. I contend there is something more profound that is reflected in the experiences of skateboarders, musicians and math students. I suggest that it is the sense of agency they possess and feel that is the reason they do what they do – the opportunity to be self-determining, the efficacy to set challenges, the autonomy to seek ways to meet them, and the satisfaction and pride that comes with success through hard work.

In his recent works, Bandura[8] has argued that agency is the catalyst and impetus that initiates and sustains self-regulated behaviour. It is a sense of agency that allows an individual to set goals, make plans or choose strategies, implement them, monitor progress and react accordingly.

Unfortunately, Bandura, and those who have followed, have reduced agency to that of self-efficacy, one's judgement of capability for doing the task. However,

as I point in a 2004 paper[9], students' behaviours, affect and beliefs are patterned. For example, some students think, behave and feel in a mastery-oriented way in which their goals are directed towards improving their knowledge, learning the content and testing their skills. Other students think, behave and feel in a failure avoidant way, trying to avoid threats to self-worth by avoiding situations which may call ability perceptions into question. Still others may be helpless, feeling they are not capable. Considerations of these patterns suggest that it isn't just one's sense of self-efficacy that drives motivation, but also attributions, self-worth and its contingencies, and affect. Taken together, these elements constitute a sense of agency that initiates and sustains behaviour.

The role of agency in motivation is evident in our examination of the motives of musicians. In our interviews, musicians were asked why they enjoyed making music. Like skateboarders, musicians enjoyed making music because of the challenge and the accompanying sense of satisfaction. They relished the opportunities to work on diverse and difficult pieces, and revelled in the feelings of accomplishment when they had mastered those pieces. At same time, they also reported experiencing joy, relaxation and serenity. Making music was an uplifting experience, and these emotions were part of why they enjoyed it. But they also said making music was existential – it was part of who they were, part of their identity. The interviews with skateboarders did not suggest this theme of identity; however, skateboarders who were surveyed tended to agree that one of the reasons they skateboarded was because it was part of who they were. There may be a recursive mechanism at work – they did it because it was part of who they were; but the success and emotions were self-enhancing to the point that the experiences become part of their sense of self.

The centrality of agency is evident in the strategies music students used to cope with the evaluative contexts they encountered in performance and judging. The primary aim of these strategies was to establish psychological control in a setting in which they otherwise had little control. Music students knew they had to practice and be well-prepared which increased their confidence. They developed ways of helping themselves concentrate by focusing on positive thoughts and avoiding distractions. They also tried to create an adaptive and supportive mindset in which they focused on their love of music and relaxation. By using these strategies, music students were able to assume psychological control over the evaluative context.

Although Tom and Jerry lacked ability and were constantly exposed to contexts which evaluated them in a negative way, I contend that they possessed a sense of agency which sustained their motivation and enabled them to experience, on occasion, flow. Removed from an evaluative context, that sense of agency, as limited as it might be, was allowed to blossom and enabled them to experience the joy of skateboarding. Jerry stated that he enjoyed skateboarding by himself, in peace, and despite his lack of skill he wanted to become a better skateboarder and believed he could. Tom would disappear behind the quarter pipe where he

could practice unseen by others. He loved the feelings of control that skateboarding offered, and it may have been in those quiet moments that he could experience flow.

I hypothesize that agency is the reason that math students enjoy mathematics. Although they stated they enjoyed mathematics because mathematics had a right answer, rules and procedures, something to which they could bring to bear their knowledge and skill, I suggest that a sense of agency underlies these reasons. Faced with a challenge, students use their knowledge and skills to manipulate rules and procedures, working out a solution, leaving them with feelings of accomplish and satisfaction. The resulting sense of agency is the reason for their enjoyment.

Interview data collected by Schulz and McKee from females enrolled in advanced placement high school mathematics course suggest a theme of agency. They saw themselves as capable and knowledgeable. These girls enjoyed the challenge of mathematics and experienced joy with success.

To be agentic is to assume control of one's actions; to set goals, initiate and sustain behaviours directed towards achieving those goals, to monitor and regulate progress. These behaviours are illustrated in the data collected by Schulz and McKee; the girls they interviewed would set goals which would either increase their mastery or test their mastery, such as trying to solve the problems before the teacher did. They challenged themselves, and derived satisfaction and joy from meeting those challenges. Agentic people recognize they are, for the most part, responsible for their successes and failures. They both feel a sense of self-determination and exercise their autonomy. They feel pride and satisfaction in the successes they achieve. They have a strong sense of self, and their thoughts, feelings and actions are self-enhancing.

The development of a sense of agency is critical for normal human growth and capacity, and stilting it results in functional impairment. In her Master's thesis, Bernie Lindemann[10] theorized that eating disorders were a manifestation of learned helplessness. At some point in her life, a woman with an eating disorder had experienced some event or events that had left her feeling helpless. To cope with these feelings, she attempts to exercise agency by controlling food intake and manipulating body shape. Doing so is her way of establishing psychological control.

If flow is the zenith of student engagement and the purest form of intrinsic motivation, and if agency underlies both intrinsic motivation and flow, then I contend that the development of agency is Education's great imperative. To do otherwise is to fail our students. In her 1999 Master's thesis, Barb O'Keefe[11] reported that there were many things teachers do that may impede the development of agency. For example, students she interviewed commented on the way failure was treated in school. Although they recognized that mistakes

were a natural part of the learning process, in school they did not have the opportunity to learn from their mistakes. Mistakes were treated as failures; grades were given and the teachers would move on to the next topic. Failures in school would leave them feeling denigrated, inadequate, helpless, guilty and stupid. Students commented that:

> "If teachers were willing just to support students' learning as opposed to controlling students' learning, most students would take on more responsibility for their own learning and do better."
>
> "If teachers treated us more mature, pushed us more, treated us with respect and as equals in the classroom environment, gave us more independence, then students would take more responsibilities and develop a sense of accomplishment and success."

When these students were asked to list the qualities of an effective teacher, the first characteristics students described was that of nurturing and caring. Indeed, the relationship between the teacher and student is critical. In our 2001 paper[12], Barb O'Keefe and I reported that teachers who saw their teachers as nurturing and supportive of learning were more likely to be more agentic; they were less likely to make external attributions and adopt performance goals. Sharon Jarvis[13] identified a group of work avoidant Grade 7 students and interviewed them for her Master's thesis. She reported that students may not work for a teacher because they do not feel able to do the work (helplessness) or because of hostile feelings towards the teacher. If they do not like or respect a teacher, they may not do work for that teacher. Craig Janes[14], in a 1996 article for the Morning Watch, explored the relationship between teachers' expectations and attributions, pointing out how expectations can influence agency.

On the other hand there are many simple things that can be done to facilitate the development of agency. In a 1995 thesis, Wade Mouland[15] demonstrated that simply stating the objective at the beginning of a math lesson increased students' self-efficacy. This simple act is important because as students recognize the goal to be achieved, see themselves working towards the goal, and achieve success they will feel pride and satisfaction and attribute the outcomes to their own efforts. Using a think aloud protocol in Peggy Wheeler's mathematics classroom, we found an increase in students' motivation for mathematics. Students' self-efficacy increased, but more importantly, their resilience improved. In her 1996 Morning Watch article, Barb O'Keefe[16] described a pedagogy for enhancing the motivation of her basic level students, the foundation of which was supporting students' sense of agency.

A student's sense of self-worth is often contingent upon being able to do find something that they are good at. Sonia Harvey's 1995 Master's thesis[17] explored the relationship between perceived competence and worth, pointing to a number of different strategies students may use to protect self-worth. Self-worth is often

linked to perceptions of competence; that is students need to be able to find something that they are interested in and good at. Being able to participate in those activities will enable them to develop a sense of agency and self-worth. One of the most important functions of contemporary secondary schools is to offer students a wide variety of experiences which will allow them to explore, finding something they are good at. In the 1990s, cuts to arts and music curriculum in favour of emphasizing mathematics and science would have limited the opportunities for many students find such an activity, thereby preventing them from developing a sense of agency and self-worth.

When all is said and done, teaching is a uniquely human endeavour, and education is a manifestation of our humanity. The student-teacher relationship is at the heart of education, and is fundamental to the development of agency. But agency is central to our humanity. It allows us to play, explore and build. It enables us to hope, dream and love. It is for this reason agency is education's great imperative.

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[1] Deci, E., & Ryan, R. (1985). *Intrinsic motivation and self-determination in human behavior.* London, UK: Plenum Press.

[2] Deci, E., & Ryan, R. (1985). *Intrinsic motivation and self-determination in human behavior.* London, UK: Plenum Press.

[3] Csikszentmihalyi, M. (1991). *Flow: The psychology of optimal experience.* New York, NY: Harper Perennial.

[4] Seifert, T. & Hedderson, C. (under review). Intrinsic motivation and flow in skateboarding: An ethnographic study. *Journal of Happiness Studies.*

[5] Seifert, T. & Hedderson, C. (under review). "Being one with the music:" Intrinsic motivation and flow in music. *Journal of Happiness Studies.*

[6] Seifert, T., Radu, O. & Doyle, A. (2009). *The affect-flow liason in mathematics problem-sovling.* Paper presented at the Third Annual Symposium on Mathematics and its Connection to the Arts and Sciences. Moncton, NB.

[7] Csikszentmihalyi, M. (1991). *Flow: The psychology of optimal experience.* New York, NY: Harper Perennial.

[8] Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52,* 1-26.

[9] Seifert, T. (2004). Understanding student motivation. *Educational Research, 46,* 137-149.

[10] Lindemann, B. (2000). *Etiology of eating disorders within a learned helplessness model of depression.* Master's thesis, Faculty of Education, Memorial University.

[11] O'Keefe, B. (1999). *A study in educational motivation: student's motivation related beliefs concerning co-operative education and school.* Master's thesis, Faculty of Education, Memorial University.

[12] Seifert, T. & O'Keefe, B. (2001). The relationship of work avoidance and learning goals to perceived competence, externality and meaning. *British Journal of Educational Psychology, 71,* 81-92.

[13] Jarvis, S. (1998). *Work avoidance as a manifestation of anger, helplessness, and boredom.* Master's thesis, Faculty of Education, Memorial University.

[14] Janes, C. (1996). An examination of teachers' expectations, attribution theory and student achievement. *The Morning Watch, 24.* Retrieved February 20, 2009 from http://www.mun.ca/educ/faculty/mwatch/fall96/examinat.htm.

[15] Mouland, W. (1995). *A study of the influence of instructional objectives on students' self-efficacy.* Master's thesis, Faculty of Education, Memorial University.

[16] O'Keefe, B. (1996). A teacher's interpretation of motivational strategies: Tools to help students succeed. *The Morning Watch, 24.* Retrieved February 20, 2009 from http://www.mun.ca/educ/faculty/mwatch/fall96/teachers.htm.

[17] Harvey, S. (1995). *A study of sources of competency, their value, and their influence on self-worth in children in grades 4 and 7.* Master's thesis, Faculty of Education, Memorial University.