Finding Flow In Postsecondary Teaching

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Abstract

Although the theory of flow proposed by Csikszentmihalyi was initially applied within the leisure domain, it has subsequently been utilized within many diverse settings. Perhaps the most fascinating of the resultant findings is that work may, in fact, be the context wherein flow may be more readily experienced. One specific form of work which has received little attention within the context of the flow paradigm is teaching. Although literature focusing upon flow in learning does exist, there is a relative void of research concerning flow from the vantage point of the educator. That educational flow literature which is emerging has yet to cast significant light upon higher education. Nonetheless, given the concerns for faculty satisfaction, retention, and productivity, as well as student learning, the impetus for investigation of this phenomenon within higher education is considerable. This is particularly salient as the profession of faculty offers a unique opportunity for development of both the "autotelic job" and "autotelic personality" which Csikszentmihalyi identifies. The purpose of this paper is therefore to examine the potential for flow to be utilized as a conceptual perspective from which to investigate: 1) the experience of postsecondary teaching; and 2) pragmatic strategies which may be found to improve the quality of the learning experience as well as provide opportunities for faculty renewal and enhanced career satisfaction.

Keywords: flow, anti-flow, teaching, job satisfaction

Biographical Information

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They all attain perfection when they find joy in their work

18:45, Bhagavad Gita

Over the past three decades, a significant body of literature related to Cskikszentmihalyi's state of flow has been developed. An interesting, and perhaps surprising finding to emerge has been that respondents more frequently report experiencing

the highly rewarding psychological state of flow within the context of work than in leisure (Csikszentmihalyi, 1982c; Csikszentmihalyi & LeFevre, 1989). Nonetheless, there is an immense void in the literature when one seeks to understand the implications of flow in one specific form of work: teaching at the postsecondary level. Given the inordinate challenges confronting higher education today, perhaps now is the time to delve into this void.

As we enter the first decade of the twenty-first century, the academy is struggling with a wide range of issues - some new and some as old as higher education itself. Rarely, however, has there been a period in time wherein issues of faculty job satisfaction, as well as resultant implications for retention and recruitment, rise to such prominence. If one considers that 25% of the current faculty in higher education are dissatisfied with their jobs (Higher Education Research Institute, 1999), it should come as no surprise that projections indicate a severe shortage of qualified applicants to fill vacant faculty positions which could last for decades (Tack & Patitu, 1992). Despite this, employment opportunities in postsecondary teaching are anticipated to increase 21 to 35 percent over the next decade (Bureau of Labor Statistics, 2002).

Given this scenario, improving the quality of worklife within higher education should become a paramount concern, both for retention of current faculty as well as recruitment of new faculty. Considering that the typical full-time faculty member invests approximately 57% of his or her 53 hour work week in teaching-related activities, as opposed to 15% or less for each of research, administration, and other activities (National Center for Education Statistics, 2001), concerted investigation into the psychological mechanisms for satisfaction within the context of teaching may yield the greatest return on investment. In this regard, flow has great potential as a conceptual perspective for understanding as well as enhancing the joy to be felt in postsecondary teaching (Csikszentmihalyi, 1997b; Fox, 2000).

Foundations of Flow

In the early 1960s, while working on his doctoral dissertation at the University of Chicago, Mihaly Csikszentmihalyi (Csikszentmihalyi, 1975) noticed an interesting phenomenon among artists. When working, they became intensely absorbed, losing touch with both time and consciousness of the external world. Intimately bonded with their art, they became one with the process of creation, experiencing extreme pleasure and creativity. From this beginning, the theory of "flow" emerged. Since its introduction, the flow theory of Csikszentmihalyi (1975) has gained widespread acceptance in both popular and academic literature.

The foundational literature of Csikszentmihalyi (1975) describes the flow state as one in which:

> Action follows upon action according to an internal logic that seems to need no conscious intervention by the actor. He experiences it as a unified flow-

> ing from one moment to the next, in which he is in control of his actions, and in which there is little distinction between self and environment, between stimulus and response, or between past, present, and future. (p. 36)

The state of mind that Csikszentmihalyi (1975) has therefore proposed as "flow" encompasses many attributes. Among these are extreme involvement in the activity to the point of "loss of self," exclusion of distractions from consciousness, freedom from worry and boredom, intrinsic motivation, and distortion of sense of time.

The source of this flow state can be found in the condition in which the goals of the situation are clear and the individual's abilities are able to adequately meet the demands of this situation. Specifically, the demands are perceived as a challenge and require neither a greater level of skill than the individual possesses, nor a lesser level (Csikszentmihalyi, 1975). Subsequent research has suggested that congruence of challenge and skill is indeed the essential foundation for the flow experience. Additionally, some literature has suggested that both the challenge and skill involved must be balanced, yet each must exceed the level that is typical in day-to-day situations (Ellis, Voelkl, & Morris, 1994).

Flow is therefore distinct from everyday experience and extremely enjoyable. One frequently hears athletes speak of "being in the zone" or surfers being "one with the wave." It is the total concentration, the demand upon one's psychic energy and the fulfillment of the outcome that make flow a pinnacle of experience. As asserted by Csikszentmihalyi (1997a), "it is the full involvement of flow . . . that makes for excellence in life" (p. 32).

Many recognized the meaningful nature of flow-type experiences prior to its definition by Csikszentmihalyi. William James (1890/1950) perceived that "we thus may live through a real outward time...and yet not feel the time or infer it from any inward sign" (p. 200). Maria Montessori (1917) based her life's work upon the observation of a child wherein "such a polarisation of attention took place, the child began to be completely transformed" (p. 68). John Dewey (1934) also recognized that within certain optimal states the individual experiences "complete interpenetration of self and the world of objects and events" (p. 19). However, no one has done more to operationalize and popularize this state of optimal experience than Csikszentmihalyi.

Due to its initial applications within the leisure domain, research concerning the flow paradigm has typically focused upon examination of traditional leisure-based experiences. Within this context, the flow paradigm has found great support. Indeed, Mannell, Zuzanek, and Larson (1988) have found flow to be a primary intrinsic reward for leisure behavior. This emphasis upon flow in leisure is understandable when considering the similarity between the attributes of flow and those of leisure, such as intrinsic motivation and perceived freedom (Iso-Ahola, 1979), as well as goal-orientation (Neulinger, 1974). Perceived control has also been considered to be a factor in both leisure (Propst & Kurtzz, 1989) and flow (Mannell, Zuzanek, & Larson, 1988).

Nonetheless, it has been found that individuals engaging in widely diverse activities report the flow experience in remarkably similar terms (Csikszentmihalyi, 1975; Csikszentmihalyi, 1997a). Flow experiences have been recognized in people engaging in traditional forms of leisure activities such as playing chess, reading, participating in sports, or dancing (Csikszentmihalyi, 1996), as well as activities not typically associated with leisure such as performing surgery (Csikszentmihalyi, 1990), practicing religious rituals, and learning (Csikszentmihalyi, Rathunde, & Whalen, 1993), among others. This indicates that flow is a unified, holistic experience, distinct from any activity-specific relationship.

Extrapolating from Csikszentmihalyi's concept of flow, Allison and Duncan (1987) have proposed that an antithetical state must exist which they have designated "anti-flow." Unlike flow, there is a lack of personal challenge which may result in extreme consciousness of the passage of time. Consequently, worry and/or boredom may play a significant role. A perception of lack of control of the situation and/or self may be a component, as well. Allison and Duncan suggest that anti-flow indicates problematic involvement in an activity.

Flow and Work

Although initially associated with leisure behavior, the implications for flow theory in the work environment are vast. The self-actualizing nature of work has long been recognized. Maslow (1965) describes "eupsychian" work as that which "is enjoyed, is even fascinating, is even loved" (p. 29). Garfield (1986) has spoken of those peak performers who exhibit "a passion to create one's self through one's work" (p. 34). It is then proposed that optimum experience in work is realized when flow is achieved (Csikszentmihalyi, 1988; Csikszentmihalyi, 1997a).

Several studies have concurred with this premise. Csikszentmihalyi (1982c), using an open-ended questionnaire based upon three diverse descriptions of the flow experience, interviewed 71 adults concerning their perceptions of flow. Contrary to his expectations, the activity that respondents considered most conducive to their flow experiences was work. In fact, nearly one third of the respondents reported that flow occurred most often within the context of work.

These findings were consistent with those of Csikszentmihalyi and LeFevre (1989). In this study, flow experiences were reported to occur more often in work than in leisure. In fact, flow occurrences were reported more than three times as often within the context of work (51%) than in leisure (17%).

The preceding studies suggest that not only are the opportunities for flow experiences great in the work environment but for many people the most powerful "flow-like" experiences occur more frequently within the context of work than that of leisure. Given that between 20-45% of the average adult's time is spent in work-related activities

(Csikszentmihalyi, 1997a), more detailed studies are warranted concerning not only flow in work, but the existence of flow and anti-flow within specific occupational contexts, as well.

Flow and Postsecondary Teaching

One specific form of work which has received little attention from the perspective of the flow paradigm is the teaching profession. Pedagogy, training, effectiveness, and negative experiences, such as stress and burnout, have all received considerable attention. Yet, comparatively little research has focused upon the pleasure, involvement, and challenge to be found within the teaching context, particularly as it relates to the immediate instructional environment and its improvement. It is therefore interesting to note that there is a relative void of information concerning the state of flow within the teaching environment. This void is particularly apparent when considering flow from the vantage point of the postsecondary educator.

In one of the few studies to investigate flow and postsecondary education, Allison and Duncan (1987) examined the activities of women in two occupational strata: university professors and blue collar workers. The results of this study indicated that the profession of university faculty presented a primary opportunity for the flow experience among those subjects interviewed. In fact, among those faculty interviewed, most experienced their greatest degree of flow within the context of work. At times, anti-flow resulted, as well. Although this research does not specifically intend to differentiate flow within the teaching, scholarship and service roles of the faculty respondents, we may nonetheless begin to recognize that teaching at the university or college level has considerable potential to become a flow-inducing experience. It also suggests that examination of these flow and anti-flow experiences may result in insights as to the nature of the teaching experience for the postsecondary educator.

One may then ask, "Why is flow in teaching valuable?" There are two aspects to this question. First, if a teacher does not enjoy the profession, then he or she may be living a life wherein a substantial proportion of each day is personally unrewarding. If taken to an extreme, negative psychophysiological effects, such as stress and burnout, may result (Burke & Greenglass, 1989; Joseph, 2000; Lazarus & Folkman, 1984). Given the great enjoyment to be found in flow, it is conceivable that facilitation of flow experiences may be found to play a role in mitigating such impacts.

Emphasizing the significance of burnout, Armour, Caffarella, Fuhrmann, and Wergin (1987) claim it to be one of the most pressing problems facing academe. They define burnout in the professorate as "the condition of boredom, indifference, and discontent with one's profession" (p. 4). This definition particularly reflects the value of facilitating flow in the teaching experience, for in flow "there is no time to get bored" (Csikszentmihalyi, 1975, p. 36).

Second, if the faculty member exhibits this lack of enjoyment within the classroom environment, he or she "conveys the message to students that learning is only a

means to other ends and lacks intrinsic value" (Csikszentmihalyi, 1982a, p. 21). This may have direct ramifications upon student motivation and achievement, as well as socialization (Csikszentmihalyi, 1981a). Armour, Caffarella, Fuhrmann, and Wergin (1987) support this conclusion, particularly within the university context:

> For the faculty, the situation is serious because burnout affects a professor's teaching, research, and service, the three traditional roles of a college or university educator. The sense of detachment can be contagious for students and colleagues. (p. 4)

According to Chenery (1990), John Dewey also recognized long ago that "we must create the conditions for the teachers that we wish them to create for the students" (p. 14). Nelson (1981) concurs with this notion, emphasizing the positive effects that satisfaction with the instructional experience can have upon both teacher and student. He claims that college faculty should be "excited about learning and capable of communicating this excitement to others" (Nelson, 1981, p. 7). Csikszentmihalyi and McCormack (1986) also recognize that "teachers' involvement with subject matter translates into effective learning for students" (p. 418).

McKeachie (1982) argues for the necessity of understanding enjoyment within teaching, particularly as it relates to learning. He states that "if we wish to increase the effectiveness [of teaching] we need to consider ways of increasing the intrinsic satisfactions found in teaching" (p. 8). Bess (1982) agrees that intrinsic satisfaction is the key to producing a motivated faculty, proposing that "teaching as conceived and practiced in colleges and universities will not yield intrinsic rewards of sufficient magnitude to sustain faculty motivation" (p. 101).

We must also recognize the impact of teacher satisfaction upon students' ability and motivation to learn. Csikszentmihalyi and McCormack (1986) wonder aloud, "how can young people believe that the information they are receiving is worth having, when their teachers seem bored, detached, or indifferent" (p. 419). They woefully conclude that "to the extent that teachers cannot become joyfully involved in the task of teaching, their efforts will be largely in vain" (p. 419). Flow theory provides a solid foundation for increasing the intrinsic satisfaction to be found within teaching, to the benefit of both teacher and student.

Many studies support the hypothesis that student learning is increased by excitement and enthusiasm in the teacher's presentation of material (McKeachie, 1997; Murray, 1997). This indicates that teacher attitude can indeed impact student learning in various manners.

Modeling theory supports this proposition, as well. As Bandura (1969) noted in his foundational work, observing a respected or well-liked individual performing a behavior can be particularly effective in increasing the acquisition and frequency of these behaviors in the observer. McKeachie (1997) concurs, stating that a "teacher's enthusi-

asm about the interest and value of the subject acts as a model that influences the value students place upon learning the material" (p. 406). The same holds true for reducing or eliminating certain behaviors. Therefore, if we wish to promote excitement and enjoyment in learning, modeling theory would suggest that faculty must exhibit these behaviors as well.

Teaching as Play

Although work and leisure are often perceived as discrete entities in post-Industrial societies, this distinction may be artificial (Kelly, 1978; Neulinger, 1981). In fact, Turner (1974) claims that "the function of many games is to reinforce the mental paradigms we all carry in our heads which motivate us to carry out energetically the tasks our culture defines as belonging to the 'work' sphere" (p. 90).

Some definitions of play bear similarity to descriptions of flow. According to Huizinga (1949), play is an activity which is outside ordinary reality, and absorbs the player intensely and completely, as well as proceeds within its own boundaries of time. Caillois (1961) notes that, among other attributes, play is freely chosen, exists within its own dimensions of time and space, and is uncertain yet with specific criteria for performance. All these attributes of play relate to flow, as well (Csikszentmihalyi, 1997a).

However, as Csikszentmihalyi (1981b) notes, "playfulness, not play, was the crucial dimension they [Huizinga and Caillois] were seeking to define" (p. 20). Similarly, in describing the "play-like" nature of a flow inducing job, Csikszentmihalyi (1979) is referring to "the experience of playfulness, rather than play itself" (p. 260). This type of work environment Csikszentmihalyi labels the "autotelic job" (Csikszentmihalyi, 1990, p. 152).

In creating the autotelic job, Csikszentmihalyi proposes emphasizing the "play-like" aspects of the activity, thereby creating a work environment which, in several aspects, resembles a game. He first suggests structuring the activity so the challenges are adequately met by the skills of the individual (Csikszentmihalyi, 1975, 1997a). This includes the flexibility to manipulate the level of situational demands in order to match the specific skills available at the moment.

Corresponding to flexibility of situational demands is the freedom to structure the activity so that a wide range of challenges are available (Csikszentmihalyi, 1982b; Feldman, Csikszentmihalyi, & Gardner, 1994). These challenges may differ both quantitatively and qualitatively. Such diversity allows for individual growth and development (Csikszentmihalyi, 1997a).

The activity must also be structured to allow the individual to become acutely involved within its performance. This relates specifically to the ability to focus perception upon the activity, attend to relevant stimuli, and exclude from consciousness that which is extraneous (Csikszentmihalyi, 1982c).

Finally, the autotelic job is organized to emphasize immediate feedback concerning progress toward a goal (Csikszentmihalyi, 1982c). This implies overt and clear criteria for adequate performance, as well as goal-directedness of the activity.

Csikszentmihalyi (1975, 1985, 1988) has exemplified an autotelic job that surprisingly exhibits a high degree of playfulness, as well as a high degree of flow: that of surgeon. Admittedly, many extrinsic rewards exist for the surgeon. Nonetheless, these studies illustrate that the surgeons interviewed perceived the act of surgery as the primary reward which they received. Many stated that so enjoyable, and so totally involving was the act of surgery that they would do it even if they were not paid. For most, their enjoyment took the form of flow experiences, primarily due to the their involvement in and facilitation of the "play-like" nature of the activity.

Nonetheless, Csikszentmihalyi (1990) suggests that in order to provide a foundation for flow within the work context, modifying one's work environment is not alone sufficient. One must also possess an autotelic (or flow-conducive) personality. Herein, personal perceptions involving distinctions between work and non-work diminish or disappear, and occupational constraints such as exacting delineations of job duties are envisioned as opportunities for expressing creativity and freedom. Csikszentmihalyi (1988, 1990, 1997b) proposes that there may be a neurological factor involved in the autotelic personality, yet it may also be developed through practice or even learned. Ellis, Voelkl, and Morris (1994) have affirmed the value of the autotelic personality in the flow experience. Further, their research proposes that the autotelic nature of an individual may even play a greater role in the flow experience than the perceived balance of challenge and skill. Nonetheless, both the autotelic personality and the autotelic job are critical for experiencing flow in work.

Teaching at the university level provides opportunities to develop the autotelic job as well as the autotelic personality. McKeachie (1982) claims that for most college and university faculty, intrinsic motivation and satisfaction are the primary reasons for entering the field, as well as remaining within it. Further, Deci and Ryan (1982) state that to provide for enjoyment of teaching within higher education, "it is a matter of providing the conditions within which teachers' intrinsic motivation can flourish" (p. 30). Thus, "when teachers have opportunities...to choose optimal challenges, they seem to be more intrinsically motivated" (p. 31) Given the role that intrinsic motivation plays in both teaching and flow, it may therefore be recognized that the foundation for facilitating flow within the teaching context is strong.

Mannell, Zuzanek, and Larson (1988) have suggested that perceived freedom is critical in facilitating the flow experience. Csikszentmihalyi and Graef (1980) concur with the importance placed upon freedom. If, indeed, freedom within one's occupational constraints indicates a greater possibility of experiencing flow in work, then postsecondary teaching provides just such an opportunity. The freedom to structure the work environment, which is essential to the autotelic job, is apparent in the interviews of university

faculty by Allison and Duncan (1987). In summarizing the responses, they concluded that "the university structure provided the professional with a relatively open system (a high degree of autonomy and much freedom to structure one's day as one chooses)" (Allison and Duncan, 1987, p. 157).

True occupational freedom is particularly prominent within the postsecondary academic environment. According to Quick (1987), "for faculty and students in academic institutions, there is a form of freedom that is uncommon in other work organizations or social institutions" (p. 76). Goodale (1990) agrees that university faculty possess occupational freedom "to an extent uncharacteristic of other work, generally including being self-employed" (p. 84). Besides its importance to the individual, this freedom also has "a real functional value in the generation and dissemination of knowledge" (Quick, 1987, p. 76).

While occupational freedom plays a central role in the potential for autotelism in postsecondary faculty, particular attention must be placed upon the existence of clear criteria for performance in the role of faculty member, as well. Such criteria are both short-term (e.g. excellence in teaching as reflected by standardized teaching evaluations) and long-term (e.g. distinction in scholarship as reflected by successful tenure). According to Gmelch (1984), faculty are often unclear of these criteria. And in such instances, insufficient or irrelevant feedback on performance creates additional pressures, often leading to stress (Seldin, 1987). Yet clear criteria and the resultant relevant feedback are essential for the flow experience (Csikszentmihalyi, 1990). If flow is to be experienced within the teaching environment, appropriate understanding of performance in relation to criteria is essential. Otherwise, anti-flow may be the result.

Within the classroom, flow can therefore be facilitated through freedom to structure the instructional process to best meet the demands of the situation, particularly in relation to personal skills and immediate feedback based upon clear criteria. McKeachie (1982) proposes that those "individuals who enjoy teaching...are wrapped up in the enjoyable complexities of determining the best methods for teaching a particular subject matter to a particular group of students" (p. 11). Schneider and Zalesny (1982) concur, stating that many university faculty are attracted to the profession because it meets their need for challenge. Nonetheless, McKeachie (1982) recognizes that skills must be commensurate with the challenges of the instructional setting.

> Thus, to the degree that we can help faculty members develop additional skills in teaching so that they have a repertoire of techniques and methods to draw upon, we are likely to increase the faculty members' satisfaction in teaching. (p. 11)

This balance between skill and challenge is essential for the flow experience, as well.

Armour, Caffarella, Fuhrmann, and Wergin (1987) also emphasize the necessity for flexibility in structuring the work environment by faculty, particularly in relation to

the self. They claim that as rewards in the university change or diminish, "faculty members must define vitality individually" (p. 6). In their review of the literature, as well as their own research, they have found that "most senior faculty members are very good at redefining their roles as they mature" (p. 6). Specifically, "successful faculty members seek out their own interests within the broad needs of the institution" (p. 7). This suggests that teaching longevity and experience may therefore play a role in facilitation of flow states in teaching.

Bess (1982) agrees with this contention, proposing that "teaching is risky, especially to new faculty, because it forces them to demonstrate a competency for which they have had no training" (p. 102). Through experience, however, a teacher has the opportunity to develop a diversity of context-appropriate teaching strategies which may be utilized with much less self-conscious intrusion into the teaching/learning process. Teachers with higher levels of experience have therefore been found to not only "develop automaticity for the repetitive operations that are needed to accomplish their goals" (Berliner, 1992, p. 233), but to also be "more sensitive than novices to task demands and the social situation" (Berliner, 1992, p. 235). Both these attributes are indicated as critical to facilitation of the flow state (Csikszentmihalyi, 1975).

The diversity of teaching strategies has also been found to increase with greater teaching experience (Carter, 1990). Conversely, a lack of skills has been found to be a cause of anxiety (Pintrich, 1990). Yet this anxiety can be remediated to some extent by careful preparation (Pintrich, 1990). Given the relationship of "anxiety" as a primary "non-flow" state (Csikszentmihalyi, 1975), experience and preparation emerge as vital in facilitating flow and remediating anti-flow.

Further, discussions of work often focused upon the problem solving and creativity necessary to successfully negotiate the challenges of each day. Once again, this balance of skills and challenge suggests that teaching provides the opportunity to develop and maintain the autotelic personality which Csikszentmihalyi (1990) identifies. Supporting this proposition, Schneider and Zalesny (1982) maintain that those individuals who find the academic setting rewarding are "individuals with strong self-actualization, growth, and achievement needs, for whom work is as natural as play, and who enjoy a challenge and taking a moderate risk" (p. 38). Allison and Duncan (1988) also found that the university faculty whom they interviewed exhibited little distinction between their work and non-work environments. Within their interviews, discussions of work and leisure were often intertwined. This "spillover" effect, wherein boundaries between work and leisure are indistinct is supported by a considerable quantity of research (Edwards, 2000; Zedeck, 1992). These are all attributes which, again, indicate the foundations for flow.

The importance of facilitating flow specifically within the instructional role of faculty is emphasized by the value placed upon this activity. According to Seldin (1987), "most college and university professors have a high regard for classroom teaching and devote vast amounts of time and effort to it" (p. 16). Chenery (1990) agrees with this

generalization, stating that "the most meaningful part of being a professor for me was the teaching part of the job" (p. 15). Perhaps this sheds light upon the reason that the typical faculty member devotes 57% of his or her work time to teaching-related activities (National Center for Education Statistics, 2001).

Others outside the faculty ranks agree upon the high priority of teaching among the many diverse roles of the faculty. In fact, "many groups (often including, not incidentally trustees, students, and parents, who must finance education through tuition and taxes) believe that the primary job of the faculty should be to teach students" (Mowday, 1982, p. 59). Therefore, in recognition of the high regard placed upon the act of teaching by both faculty and others outside the profession, satisfaction within this particular context must be maximized. Flow can play a primary role in this satisfaction.

The potential for flow specifically within the instructional environment is further reinforced by responses derived from the interviews of university faculty by Allison and Duncan (1988). Many respondents emphasized the great amount of engagement they received from working with their students. Therefore, we may recognize that although flow, as well as the educational process, are individual experiences, they may be facilitated by interaction with others (Csikszentmihalyi, 1997a).

To further support the contention that the role of university faculty lends itself to both the autotelic job and autotelic personality, evidence may be derived from the pedagogical paradigm proposed by Fenstermacher (1992). Within this conceptualization, "pedagogy consists of two critical attributes: method and manner" (Fenstermacher, 1992, p. 95). If we may extrapolate this into flow theory, method can be conceived of as the broad range of teaching behaviors (the autotelic job), while manner can be viewed as those activities which reveal the nature of a person (the autotelic personality).

As Fenstermacher (1992) states, "manner and method are thus concurrent and, when one serves the other, complementary" (p. 98). Therefore, it seems that Csikszentmihalyi has approached a conceptualization of the holistic nature of the pedagogical environment as it relates to flow, for "neither [manner or method] offers much of educational significance without the other. Both working together provide the basis for...profound engagement" (Fenstermacher, 1992, p. 107). Such "profound engagement" is the basis of flow (Csikszentmihalyi, 1975).

Implications for Research

If enjoyment in teaching is then recognized as valuable not only for the teacher, but for the student as well, it seems reasonable to turn our attention to inquiry into the states of flow and anti-flow within postsecondary teaching. Given the potential importance of this topic, the impetus for empirical investigation seems to be substantial. Despite this, there is currently a relative void of directed research in this area (Csikszentmihalyi, 1997b).

To fully understand the mechanisms for maximizing flow and minimizing anti-flow within teaching, we must first gain a deeper understanding of the flow experience itself within the instructional environment. Despite the plethora of research concerning education, few studies have investigated the application of Csikszentmihalyi's flow model to teaching. Of those few which have made initial explorations within this context, the vast majority have focused upon the phenomenon of flow solely from the perspective of the student engaged in the learning process.

A further limitation to our understanding of flow in postsecondary teaching is the existence of only a rudimentary body of research applying flow within the context of higher education, and even this does not specifically examine the instructional process from within the framework of flow theory, particularly from the perspective of the university faculty. Relevant existing data are consequently derived from sources in which the primary research objectives were not specifically related to flow in teaching. Yet, the findings do yield insights into the nature of this phenomenon, nonetheless. Research focusing upon the existence and context of flow within the instructional environment, as well as the complex relationships between job satisfaction and learning, is indeed fertile, yet untilled ground.

The foundational question we must of course ask is whether university faculty do indeed experience flow and/or anti-flow within the classroom teaching environment, and if so, under what conditions. Substantial evidence has been found that students may experience flow within the classroom learning environment (Csikszentmihalyi, 1996), but what of the teachers? In order to gather relevant data, methodologies which have been utilized in examining flow would present specific considerations and cautions for use within an educational context. Fundamental issues of accuracy and reliability of *post hoc* self-reporting measures would need to be weighed against the pragmatics of utilizing obtrusive *in situ* analyses (Borrie, Roggenbuck, & Hull, 1998). This is particularly true given the dynamic and interactional nature of both flow and the learning environment.

If such research does indeed indicate that faculty do experience flow in classroom teaching, methods which these faculty utilize to manipulate these conditions in order to facilitate flow or remediate anti-flow should be investigated. Csikszentmihalyi (1990) proposes that flow can be achieved via five essential steps: (a) set an overall goal for the activity (and sub-goals if relevant); (b) find ways of measuring success in achieving the goal(s); (c) focus concentration on the task at hand, increasingly making finer distinctions in the challenges involved in the activity; (d) continue to develop the relevant skill set; and (e) continue to increase the complexity and difficulty of the activity. However, practical heuristics that would provide guidance in achieving flow through accomplishing these steps within the context of classroom teaching at a postsecondary level are notably absent from the literature. Yet, it is through the development of these practical heuristics that perhaps the greatest contribution will be made. Especially relevant are those strategies that facilitate the flow state and minimize opportunities for experiencing anti-flow which may thereby make teaching a more enjoyable and intrinsically reward-

ing experience. Specifically, the necessary skills for utilizing these strategies appropriately within the teaching context can then be subsequently integrated into professional development and faculty renewal opportunities.

Finally, if the existence of such flow and anti-flow states is indeed indicated, and pertinent conditions and strategies identified, additional investigation may then be considered. Of particular relevancy would be the relationship between the facilitation of flow in teaching and such factors as faculty job satisfaction, retention and productivity. The relationship between faculty flow and factors such as student learning and retention may be considered, as well.

Given the dynamic nature of the classroom, a prudent approach to examination of flow and anti-flow within postsecondary classroom teaching may be one grounded in an ecological perspective. Central to this viewpoint is the belief that the classroom is an interactional environment, and mutually constructed by both students and teachers (Shulman, 1990). Consequently, ecological research is quite relevant to investigation of flow within the classroom context. According to the foundational work of Hamilton (1983), ecological research focuses upon:

a. attention to reciprocal interaction between individuals and their environment

b. examining teaching and learning as continuously interactive processes

c. nesting the classroom context within other contexts which may interact with it, such as the family, community, and culture

d. valuing respondents' thoughts, perceptions, attitudes, and feelings as important sources of data

This approach is consistent with predictions of Schulman (1992). He envisions that research on teaching "will grow increasingly cognitive, substantive, contextual and — in several senses — local" (p. 28). Again, these conditions are consistent with examination of flow.

Therefore, if ecological research does prove to be a sound perspective from which to examine the phenomenon of flow in university classroom teaching, then not only must contextual and product variables in flow be examined, but their role within the interactive relationship between student and teacher must be investigated in light of these findings.

A Final Consideration

Can we then ignore possible contributions to faculty job satisfaction and quality of worklife from application of flow theory given that twenty-five percent of postsecondary faculty are dissatisfied with their job (Higher Education Research Institute, 1999)? Facilitating faculty job satisfaction can impact more than attrition rates. Increased faculty

satisfaction can also improve productivity (both qualitatively and quantitatively), boost morale, create greater commitment and involvement, and increase acceptance of developmental and evaluative efforts (Cameron, 1982).

Yet increased faculty job satisfaction can also affect the student in many ways. As learning is interactive, with both the student and teacher define the meanings inherent within it, then what meaning will a student derive from a disaffected teacher? A significant body of research asserts that effective teachers "explicitly demonstrate, model, explain desired cognitive processes" (Pintrich, 1990). Faculty dissatisfaction can result in increased student attrition and negative student perceptions concerning quality of their education (Cameron, 1982). Conversely, student learning, retention, effort, and achievement may all be positively impacted by improved faculty job satisfaction (Cameron, 1982).

If faculty discontent impacts the learning process as well as creates issues related to job satisfaction and retention, can we afford to relegate the potential to be found within flow in postsecondary teaching to an "academic" issue? Given the great enjoyment which may be found in flow, it suggests that our profession should encourage, if not facilitate the development of strategies for facilitating this state within the context of teaching. If faculty can indeed develop the skills necessary for experiencing flow in the teaching process, the benefits would be realized by both faculty and student alike.

References

Allison, M. T., & Duncan, M. C. (1987). Women, work, and leisure: The days of our lives. *Leisure Sciences, 9*, 143-162.

Allison, M. T., & Duncan, M. C. (1988). Women, work, and flow. In M. Csikszentmihalyi & I. S. Csikszentmihalyi (Eds.), *Optimal experience: Psychological studies of flow in consciousness* (pp. 118-137). New York: Cambridge University Press.

Armour, R. A., Caffarella, R. S., Fuhrmann, B. S., & Wergin, J. F. (1987). Academic burnout: Faculty responsibility and institutional climate. In P. Seldin (Ed.), *Coping with faculty stress* (pp. 3-11). San Francisco, CA: Jossey-Bass.

Bandura, A. (1969). *Principles of behavior modification.* New York: Holt, Rinehart and Winston.

Berliner, D. C. (1992). The nature of expertise in teaching. In F. K. Oser, A. Dick, & J. Patry (Eds.), *Effective and responsible teaching: The new synthesis* (pp. 227-248). San Francisco, Jossey-Bass.

Bess, J. L. (1982). The motivation to teach: Meanings, messages, and morals. In J. L. Bess (Ed.), *Motivating professors to teach effectively* (pp. 99-107). San Francisco, CA: Jossey-Bass.

Borrie, W. T., Roggenbuck, J. W., & Hull, R. B. (1998). The problem of verbal reports in recreation research : Review, recommendations, and new directions. *Tourism Analysis, 2*(3-4), 175-183.

Bureau of Labor Statistics. (2002). Teachers - Postsecondary. *Occupational Outlook Handbook.* Retrieved April, 10, 2002 from http://stats.bls.gov/oco/ocos066.htm

Burke, R. J., & Greenglass, E. R. (1989). Psychological burnout among men and women in teaching: An examination of the Cherniss Model. *Human Relations, 42*(3), 261-273.

Caillois, R. (1961). *Man, play, and games.* New York: Free Press.

Cameron, K. S. (1982). The relationship between faculty unionism and organizational effectiveness. *Academy of management journal, 25*(1), 6-24.

Carter, K. (1990). Teachers' knowledge and learning to teach. In W. R. Houston (Ed.), *Handbook of research on teacher education.* (pp. 291-310). New York: Macmillan.

Chenery, M. F. (1990). Does this path have a heart? In D. Dustin (Ed.), *Beyond promotion and tenure: On being a professor* (pp. 7-20). San Diego, CA: San Diego State University's Institute for Leisure Behavior.

Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety.* San Francisco, CA: Jossey-Bass.

Csikszentmihalyi, M. (1979). The concept of flow. In B. Sutton-Smith (Ed.), *Play and learning* (pp. 257-274). New York: Gardner.

Csikszentmihalyi, M. (1981a). Leisure and socialization. *Social Forces, 60*(2), 332-340.

Csikszentmihalyi, M. (1981b). Some paradoxes in the definition of play. In A. T. Cheska (Ed.), *1979 Proceedings of the Association for the Anthropological Study of Play* (pp. 14-26). West Point, NY: Leisure Press.

Csikszentmihalyi, M. (1982a). Intrinsic motivation and effective teaching: A flow analysis. In J. L. Bess (Ed.), *Motivating professors to teach effectively* (pp. 15-26). San Francisco, CA: Jossey-Bass.

Csikszentmihalyi, M. (1982b). Learning, "flow", and happiness. In R. Gross (Ed.), *Invitation to lifelong learning* (pp. 166-187). Chicago, IL: Follett.

Csikszentmihalyi, M. (1982c). Toward a psychology of optimal experience. In L. Wheeler (Ed.), *Review of personality and social psychology* (pp. 13-36). Beverly Hills, CA: Sage.

Csikszentmihalyi, M. (1985). Reflections on enjoyment. *Perspectives in Biology and Medicine, 28*(4), 489-497.

Csikszentmihalyi, M. (1988). The flow experience and its significance for human psychology. In M. Csikszentmihalyi & I. S. Csikszentmihalyi (Eds.), *Optimal experience: Psychological studies of flow in consciousness* (pp. 15-35). New York: Cambridge University Press.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.

Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: HarperCollins.

Csikszentmihalyi, M. (1997a). *Finding flow: The psychology of engagement in everyday life*. New York: Basic Books.

Csikszentmihalyi, M. (1997b). Intrinsic motivation and effective teaching: A flow analysis. In J. L. Bess (Ed.), *Motivating professors to teach effectively* (pp. 72-89). Baltimore: Johns Hopkins University Press.

Csikszentmihalyi, M., & Graef, R. (1980). The experience of freedom in daily life. *American Journal of Community Psychology, 8*, 401-414.

Csikszentmihalyi, M., & LeFevre, J. (1989). Optimal experience in work and leisure. *Journal of Personality and Social Psychology, 56*(5), 815-822.

Csikszentmihalyi, M., & McCormack, J. (1986). The influence of teachers. *Phi Delta Kappan, 67*(6), 415-419.

Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1993). *Talented teenagers: The roots of success and failure*. New York: Cambridge University Press.

Deci, E. L., & Ryan, R. M. (1982). Intrinsic motivation to teach: Possibilities and obstacles in our colleges and universities. In J. L. Bess (Ed.), *Motivating professors to teach effectively* (pp. 27-35). San Francisco: Jossey-Bass.

Dewey, J. (1934). *Art as experience*. New York: Heath.

Edwards, J. R. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *Academy of Management Review*. Retrieved September 8, 2001 from http://www.findarticles.com/cf_amgtrvw/m4025/1_25/59481961/print.jhtml

Ellis, G., Voelkl, J., & Morris, C. (1994). Measurement and analysis issues with explanation of variance in daily experience using the flow model. *Journal of Leisure Research, 26*(4), 337-356.

Feldman, D. H., Csikszentmihalyi, M., & Gardner, H. (1994). *Changing the world: A framework for the study of creativity*. Westport, CT: Praeger.

Fenstermacher, G. D. (1992). The concepts of method and manner in teaching. In F. K. Oser, A. Dick, & J. Patry (Eds.), *Effective and responsible teaching: The new synthesis* (pp. 95-108). San Francisco: Jossey-Bass.

Fox, R. F. (2000). Toward a new model for faculty renewal. In R. F. Fox (Ed.), *UpDrafts* (pp. 164-177). Urbana, IL: National Council of Teachers of English.

Garfield, C. (1986). *Peak performers: The new heroes of American business*. New York: Avon.

Gmelch, W. H. (1984). Pressures of the professorate: Individual and institutional coping strategies. In T. B. Massey (Ed.), *Proceedings of the Tenth International Conference of Improving University Teaching*. College Park, Maryland.

Goodale, T. (1990). On professing, publishing, and sometimes writing. In D. Dustin (Ed.), *Beyond promotion and tenure: On being a professor* (pp. 79-91). San Diego, CA: San Diego State University's Institute for Leisure Behavior.

Hamilton, S. F. (1983). The social side of schooling: Ecological studies of classrooms and schools. *Elementary School Journal. 83*(4), 313-334.

Higher Education Research Institute (1999). *The American college teacher: National norms for the 1998-99 HERI faculty survey*. Los Angeles: University of California.

Huizinga, J. (1949). *Homo ludens: A study of the play element in culture*. London: Routledge and Kegan.

Iso-Ahola, S. E. (1979). Some social psychological determinants of perceptions of leisure: Preliminary evidence. *Leisure Sciences, 2*, 305-314.

James, W. (1890/1950). *The principles of psychology, vol. 1*. New York: Dover.

Joseph, R. (2000). *Stress free teaching*. London: Kogan Page.

Kelly, J. R. (1978). A revised paradigm of leisure choices. *Journal of Leisure Research, 1*(4), 345-363.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Mannell, R. C., Zuzanek, J., & Larson, R. (1988). Leisure states and "flow" experiences: Testing perceived freedom and intrinsic motivation hypotheses. *Journal of Leisure Research, 20*(4), 289-304.

Maslow, A. (1965). *Eupsychian management: A journal*. Homewood, IL: Irwin-Dorsey.

McKeachie, W. J. (1982). The rewards of teaching. In J. L. Bess (Ed.), *Motivating professors to teach effectively* (pp. 7-13). San Francisco, CA: Jossey-Bass.

McKeachie, W. J. (1997). Good teaching makes a difference - and we know what it is. In R. P. Perry & J. C. Smart (Eds.). *Effective teaching in higher education: Research and practice* (pp. 396-408). New York: Agathon Press.

Montessori, M. (1965). *Spontaneous activity in education* (F. Simmonds, Trans.). New York: Schocken Books. (Original work published 1917)

Mowday, R. T. (1982). Expectancy theory approaches to faculty motivation. In J. L. Bess (Ed.), *Motivating professors to teach effectively* (pp. 59-70). San Francisco: Jossey-Bass.

Murray, H. G. (1997). Effective teaching behaviors in the college classroom. In R. P. Perry & J. C. Smart (Eds.). *Effective teaching in higher education: Research and practice* (pp. 171-204). New York: Agathon Press.

National Center for Education Statistics. (2001). *The condition of education 2001*. Washington, DC: U. S. Department of Education.

Nelson, W. (1981). *Renewal of the teacher-scholar: Faculty development in the liberal arts college*. Washington, D. C.: Association of American Colleges.

Neulinger, J. (1974). *The psychology of leisure: Research approaches to the study of leisure*. Springfield, IL: Thomas.

Neulinger, J. (1981). *To leisure: An introduction*. Boston, MA: Allyn and Bacon.

Pintrich, P. R. (1990). Implications of psychological research on student learning and college teaching for teacher education. In W. R. Houston (Ed.), *Handbook of research on teacher education*. (pp. 826-857). New York: Macmillan.

Propst, D. B., & Kurtzz, M. E. (1989). Perceived control/reactance: A framework for understanding leisure behaviour in natural settings. *Leisure Studies*, *8*, 241-248.

Quick, J. C. (1987). Institutional preventative stress management. In P. Seldin (Ed.), *Coping with faculty stress* (pp. 75-84). San Francisco: Jossey-Bass.

Schneider, B., & Zalesny, M. D. (1982). Human needs and faculty motivation. In J. L. Bess (Ed.), *Motivating professors to teach effectively* (pp. 37-46). San Francisco, CA: Jossey-Bass.

Seldin, P. (1987). Research findings on causes of academic stress. In P. Seldin (Ed.), *Coping with faculty stress* (pp. 13-21). San Francisco, CA: Jossey-Bass.

Shulman, L. S. (1990). *Research in teaching and learning: Paradigms and programs*. New York: Macmillan.

Shulman, L. S. (1992). Research on teaching: A historical and personal perspective. In F. K. Oser, A. Dick, & J. Patry (Eds.), *Effective and responsible teaching: The new synthesis* (pp. 14-29). San Francisco: Jossey-Bass.

Tack, M. W., & Patitu, C. L. (1992). Faculty job satisfaction: Women and minorities in peril. (ERIC Digest Identifier ED355859). Washington, DC: ERIC Clearinghouse on Higher Education.

Turner, V. T. (1974). Liminal to liminoid, in play, flow, and ritual: An essay in comparative symbology. *Rice University Studies*, *60*(4), 53-92.

Zedeck, S. (1992). *Work, families, and organizations.* San Francisco: Jossey-Bass.