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## THE MANAGED TEACHER: EMOTIONAL LABOUR, EDUCATION, AND TECHNOLOGY

Arlie Russell Hochschild's (1983) *The Managed Heart: Commercialization of Human Feeling*, documents the institutionalization of emotion. While the teaching profession is not prominently featured in *The Managed Heart*, teachers offer a compelling example of institutionalized emotion. Not only is emotional labour expected of teachers, but teachers are a significant force in the reproduction of emotional institutionalization. In this paper, I argue that, as a consequence of their professional duties, teachers perform significant emotional labour and that the teaching profession requires strategies to mitigate the negative consequences of emotional labour. I discuss theoretical frameworks for emotion and emotional labour, as introduced by Hochschild and elaborated by others. I then examine the expectations, conditions, and effects of emotional labour for teachers and discuss strategies, with particular focus on technology, for managing consequences of emotional labour. Finally, I consider the possibility of using chatbots as a specific technology-based coping strategy and discuss a chatbot that I created for this purpose.

### EMOTION

Hochschild (1983) presents two frameworks for emotion, one biological (which she referred to as *organismic*) and one social (which she referred to as *interactional*). The biological framework focuses on emotion as a function of the physical and chemical composition of an individual human being and draws a crisp distinction between emotions and the external events that evoke emotions. She argues that the theories of Charles Darwin, Sigmund Freud, and William James provide support for this model. Darwin's theory of emotion suggests that emotions are "universal" (Hochschild, 1983, p. 207) across individuals, as opposed to unique in individuals. Freud's theory of emotion posits that emotions are "instinctual" (p. 210), as opposed to constructed phenomena. James' theory of emotion advocates emotions as "visceral" (p. 211), as opposed to cognitive, processes.

The organismic framework of emotion is entirely individual-centered and does not attend to social influences in the construction of emotion. To capture social processes, Hochschild (1983) described an *interactional* model, in which biological emotion is re/configured by socialization. In this model, emotion is defined as "a sense that tells about the self-relevance of reality" (p. 85) and represents yet another modality through which we can understand the world. Emotions are defined by and define particular social settings and this interaction between emotion and social context produces "feeling rules" (p. 118). In this sense, "feeling is a form of pre-action" (p. 56) and feeling rules provide guidance for socially

acceptable action. Hochschild (1983) observed that feeling rules are dictated via social groups and vary accordingly. They may be communicated directly or indirectly, “by the way others react to what they think we are feeling” (p. 58). Scherer’s (2001) formulation of emotion implies that feeling rules are at least partially self-constructed, via “appraisal objectives” (p. 128). By identifying the relevance, consequences, management, and self-defining significance of an event, appropriate emotional responses can be determined, says Scherer (2001).

The influence of the social group on emotions presents an interesting problematization in incongruity of feeling, which Hochschild (1983) explained as *wrongness* and *falseness*. Given a situation in which there is an emotional response, feeling rules dictate the emotional response. In the biological/organismic model, there is no inappropriate response; it simply is the response. In the social/interactional model, disparity between the emotion displayed and the emotion felt causes tension. *Wrongness* occurs when the emotion that is felt and displayed is not the emotion dictated by the given feeling rule. *Falseness* occurs when the emotion that is displayed matches the emotion expected from the given feeling rule, but does not match the emotion experienced by the individual. The pre-conditions for wrongness and falseness are intensified by the dissociation of an individual from the social group. Dissociation can be amplified when the social group mandates feeling rules (e.g., in a business organization), as opposed to negotiates feeling rules (e.g., in a family structure). The beginnings of organization-controlled emotion are found in Taylorism, which promoted a false dichotomy of rational versus emotional in the name of scientific efficiency (Rafaeli & Worline, 2001). The ongoing management of emotion by organizations leads to characterization of this process using *structuration theory*. As described by Shuler and Sypher (2000), Giddens’ structuration theory describes how “structures constrain actors but also are produced and reproduced by them” (p. 53). This theorization informs the role of organizations and individuals in *emotional labour*.

### *Emotional Labour*

Given that human interaction inspires emotion, it is unsurprising that almost all employment requires some form of emotion management. However, some industries and professions transcend the emotion management expectations of a civil society by commoditizing emotion. Hochschild (1983) examined flight attendants as one such profession that negotiates emotion as a product. She outlined three qualifying pre-conditions for emotional labour. First, the employee’s duties include direct contact with customers. Next, the employee’s duties include altering (or maintaining) customers’ emotional states. Finally, the employee’s emotional states are managed directly or indirectly by the employer.

Employment conditions can vary widely within a single profession, sometimes requiring the consideration of emotional labour effects on an individual basis. For instance, the employment classification of *teacher* encompasses a wide range of lived experiences, which may or may not contain the pre-conditions for emotional labour. Just as a particular employment classification may not imply the pre-conditions for emotional labour, employment that satisfies the pre-conditions may

not imply a negative work experience. Whereas Hochschild (1983) viewed emotional labour as ultimately hazardous to the employee, other authors have presented cases in which conditions that qualify as emotional labour are in fact positive. For example, Shuler and Sypher (2000) found that 911 operators actually derived benefit from work necessitating emotional labour.

Bolton and Boyd (2003) called into question the scope of Hochschild's (1983) emotional labour definition and provided an expanded conceptualization by changing the motivating factor from work environment to four operating states within the work environment. The four states were elaborated as "pecuniary," "prescriptive," "presentational," and "philanthropic" (Bolton & Boyd, 2003, p. 291). Each state prescribes different pre-actions, feeling rules, displays, and consequences. The *pecuniary* state is closely aligned with the negative implication of Hochschild's (1983) vision of emotional labour, given that the consequences are listed as "alienation," "conflict," and "resistance" (Bolton, 2003, p. 19). The *presentational* and *philanthropic* states make space for positive views of emotional labour, describing consequences such as "stability" and "satisfaction" (Bolton, 2003, p. 19). The *prescriptive* state, which emerges from "professional" or "organizational" feeling rules, creates both negative and positive outcomes, describing inherently ambiguous consequences such as "contradiction" and formation of "professional identity" (Bolton, 2003, p. 19).

## EDUCATION

British Columbia (BC) K-12 public school teachers exemplify the prescriptive state, given that they operate under the expectations of several professional organizations. These expectations are communicated implicitly through day-to-day practices and interactions with fellow teachers and employers, and explicitly through documents like the BC College of Teachers (BCCT) (2004) *Standards for the Education, Competence and Professional Conduct of Educators in British Columbia*. The importance of emotion is seen in statements such as teachers "value and care for all children," ensure the "emotional security of all children," "treat all children" with "warmth," establish "relationships with students," and demonstrate "enthusiasm for learning" (BCCT, 2004, pp. 11, 15). However, as Sumsion (2000) noted, regulations such as these are not transparently transferable to practice. Teachers also operate under the expectations of the public at large. In caring for children, Price (2001) noted that teachers are expected to assume the role of the parent, both for physical and emotional well-being.

Despite the emotion management expectations that society places on the individual, there is a notable lack of emotion in schools with respect to the curriculum. Boler (1997) attributed this to a fear of departing from teacher-centered methodology and viewing emotional education as "therapy" (p. 216). She suggested that the therapy model violates teacher-centeredness in three ways: (1) the teacher does not provide instruction, since (2) there is nothing to instruct, and (3) the student-centeredness requires undivided attention from the teacher. As a consequence, teachers rely on "positional control systems" (Hochschild, 1983, p.

156) to control student behaviour using “formal rules” (Hochschild, 1983, p. 156), as opposed to accommodating the emotional states of students. To prepare students for increasingly emotion-managed workplaces, schools covertly become sites of preparation for emotion management. As Rafaeli and Worline (2001) suggested, it may be to the advantage of students to have an overt emotional management education system, so that they may be alerted to the potential dangers of emotional labour.

It is evident that the teaching profession satisfies each of Hochschild’s (1983) pre-conditions for emotional labour. The first pre-condition of direct contact with customers is clearly satisfied by the ongoing contact between teacher and student. The second pre-condition of maintaining or modifying customer emotions is certainly met, considering that teachers are responsible for the emotional well-being of the student as well as socializing students into a context-appropriate feeling rules system. The expectations of professional bodies, the public, and school administrators satisfy the third pre-condition of emotional management exercised by the employer. Given that the pre-conditions for emotional labour exist and assuming that the professional quality of teaching operates in a prescriptive state, the issue becomes one of proportion, that is, the proportion of *negative outcome* emotional labour to *positive outcome* emotional labour.

The quality of the lived experience of emotional labour depends significantly on the operating context. Hochschild (1983) described several sources that contributed to the negativity of emotional labour in flight attendants. One source of stress was an “industry speed-up” (p. 121), in which attendants were given less time to accomplish the same tasks. Teachers have similarly experienced depletion of resources, which has resulted in less time available to attend to the needs (emotional or otherwise) of each student. Hochschild (1983) noted that another source of stress for flight attendants was the perception that they were engaged in menial, trite work. She observed that this devaluation of services caused an additional burden for the attendants, forcing them to displace their indignation. A similar phenomenon is experienced by teachers, who are frequently perceived as being glorified baby-sitters that have the luck of *only* working 200 days in a year. Teaching also presents specific stressors such as varied abilities of students, class sizes, building conditions, and violence. As Hochschild (1983) noted, “there is also a general source of stress, a thread woven through the whole work experience: the task of managing an estrangement between self and feeling and between self and display” (p. 131).

Considering the above stressors in conjunction with the preconditions for emotional labour, it is reasonable to speculate about the variety of possible outcomes. Mann (2004) described three possible outcomes of the intersection of internal emotional state, external/displayed emotional state, and expected emotional state: “emotional harmony”, “emotional dissonance”, and “emotional deviance” (p. 208). Emotional harmony describes situations in which the teacher’s internal and external state coincide with the expected state, given the feeling rules. Emotional dissonance corresponds to situations in which the teacher’s internal state does not match the teacher’s externally observable state, which is being controlled in order to match the expectations produced from the feeling rules. This

corresponds to Hochschild's notion of *falseness*. Emotional deviance captures the situation in which the teacher's internal and external states deviate from the expected state. This corresponds to Hochschild's notion of *wrongness*.

Each outcome produces a set of effects on the individual. In the case of emotional harmony, Shuler and Sypher (2000) documented three positive effects, including source of humour, source of energy, and outlet for altruism. Rafaeli and Worline (2001) also presented positive effects, such as improved job performance and dedication. However, they noted that emotional dissonance and deviance can decrease job performance. Beyond impacting employment, the incongruities between feeling, display, and expectation can cause significant personal stress. As Price (2001) noted, emotional "instrumentalisation is achieving a corrosive and deadening 'spread' into ordinary intimacy and emotional exchanges of all kinds, in private and civic life" (p. 165). Winograd (2003) observed that two school-specific conditions contribute to emotional deviance. First, the isolation of teachers from colleagues contributed to emotional stress. Second, the expectation of role-modeling emotional control contributed to the control of teachers' emotional states, which resulted in dissonance or deviance. These conditions can lead to significant personal and professional dysfunction, such as "burn out," "self-alienation," and "emotional disorientation" (Zembylas, 2004, p. 304).

Given the potential perils associated with emotional labour, it is useful to consider strategies for mitigating any negative effects and amplifying any positive effects. One strategy described by Hochschild (1983) is group cohesion, which addresses dysfunction resulting from isolation by creating a support network of fellow teachers. However, she noted that this strategy may ultimately reinforce negative emotional labour experiences if members of the group insist on dwelling on their collective misfortunes without looking toward action. I received a caution regarding this phenomenon on my first day in the Teacher Education Program, when my class was warned against the "Ain't Things Awful" attitude. Zembylas (2004) suggested isolation of practice and avoiding negativity as possible approaches to dealing with these negative attitudes. These ideas are echoed in Mann's (2004) presentation of tactics and strategies for dealing with stress. Mann recommended policies encouraging emotional expression, valuing emotion as part of the job, prescribing break times, establishing emotional mentoring, and promoting emotional autonomy. While these strategies are appropriate at the administrative level, Sumsion (2000) offered a three-step heuristic that can be implemented by an individual. First, she advocated a *deliberative* practice, which implies emotional labour acts performed in a controlled fashion so that the needs of the students are tempered by the needs of the teacher. Second, she advocated a *transparent* practice, in which the needs and expectations of the teacher are clearly and unobtrusively communicated to the students. Finally, she advocated a *present* practice, in which the teacher genuinely attends to the needs of the students.

## TECHNOLOGY

In examining various emotional labour stressors and support mechanisms to which teachers are exposed, technology is notably absent. As Scherer (2001) noted, this is partly attributable to a lack of “specific studies on how the use of modern information technology changes the elicitation, regulation, and communication of emotional states” (p. 140). However, the integration of technology and social structures has been extensively researched and much has been learned that might bear on the subject of mitigating negative emotional labour effects through technology. Franklin (1990) observed that technology does not operate autonomously from the social context in which it is situated, and Zorn (2002) argued that the successful integration of technology into the social system is contingent on human response. The human response is not a binary accept/reject decision; it represents a degree of acceptance, ranging from tolerance to transmutation.

To deal with this continuum of user responses to technology, Mick and Fournier (1998) outlined a framework for: (1) understanding the paradoxical constructions of technology and (2) managing responses to the paradoxes presented by technology. Eight paradoxes, or self-contradictions, were provided by Mick and Fournier, four of which are particularly relevant to the present discussion. First, technology facilitates centralization and decentralization of control. The infrastructure that binds technology users also promotes their autonomy. Second, technology promotes a sense of competency and incompetency. Microwaves, a common staff room appliance, have notoriously variant user interfaces, which can render even the most confident microwave user somewhat uncertain. Third, technology saves and wastes resources. A grade recording system may result in efficiencies for users who are familiar with the software, yet gross inefficiencies for users who are unfamiliar with the software. Finally, technology encourages integration and isolation. A wiki used to promote collaborative authorship can degenerate into a collection of individually controlled pages.

Mick and Fournier (1998) reported that not only were users conscious of these technology paradoxes, but some users had developed strategies to manage the paradoxes. Four classes of user reaction to technology were commonly observed, permutations of temporal (before/after adoption) and affective (desire/aversion) responses: eschewing before adopting, investigating before adopting, rejecting after adopting, and integrating after adopting. These technological responses can be mapped back to the outcome of the individual’s internal/external/expected emotions. It is reasonable to assume that the feeling rule in the adoption of technology is to strive for integration. In this context, emotional harmony is represented by integration of technology in practices following the acquisition of technology. Emotional deviance is represented by both eschewing before adopting and rejecting after adopting. The internal state in these cases is suspicion, which is mirrored in outward display and action, but does not agree with the expected response. Emotional dissonance is represented by investigating before adopting. The user experiences reluctance internally, but externalizes interest, which is compatible with expectation, by pursuing an investigation of technology.

This analysis reveals that emotional dissonance can disrupt successful technology adoption. However, it is interesting to ask whether new technologies, rather than creating emotional dissonance, can serve instead to mitigate the emotional dissonance resulting from sources such as emotional labour. The answer to this question may be found in relational artifacts, which were defined by Turkle (2002) as digital processing entities that “are explicitly designed to have emotive, affect-laden connections with people” (p. 19). Relational artifacts present a potentially desirable site for personal relationships, since they may be programmed to respond to user needs and to make no demands on the user. For the teacher performing emotional labour, a relational artifact that imposes no expectations regarding affective response might form the basis for a coping strategy.

### *C(h)atbot*

Considering that consequences of emotional labour vary widely between individual teachers and that teachers typically have minimal space in their schedules or budgets for traditional therapy, *chatbots* offer a unique combination of properties well-suited to addressing the ill-effects of emotional labour. A chatbot is an artificial construct that is designed to converse with human beings using natural language as input and output. The chatbot concept was inspired by Turing (1950), who suggested a litmus test for artificial intelligence: separate a human from another entity using a teletype interface and ask the human to determine whether he or she is conversing with another person or with a machine. Alas, the chatbots that have been created to date fall short of the ability to simulate human intelligence, as evidenced by the transcripts from the annual Loebner contest (2005). However, current chatbots do have the ability to answer questions posed in natural language by using a database of predefined responses. Coupled with other technologies such as animation, text-to-speech, and speech-to-text, a faint illusion of intelligent conversation can be achieved. Today, numerous commercial websites on the Internet make use of chatbots to guide users in finding the information for which they are searching. Automated telephone operators, however frustrating, offer similar services for many commercial and government agencies.

In order to sustain an emotional infrastructure in which a human wishes to interact with technology, Bates (1994) suggested constructing interesting environments rather than attempting a more difficult task of “copying reality” (p. 125). Accordingly, while current chatbots are far from conscious, chatbot technology might still be employed to provide a dynamic, learner-centered, personal, and cost-effective way for practicing teachers to explore a complex issue such as the impact of emotional labour. A chatbot can be widely distributed at little cost, can be made available twenty-four hours a day, can allow the user to search for information along an arbitrary trajectory, and can abstain completely from passing judgment on a user. Animation and speech technology can lend a degree of charm or warmth typically missing from technology solutions. Based on advice from Disney animators, Bates (1994) suggested three characteristics for creating agents that are visually stimulating. First, *transparency*: the emotional state of the

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chatbot must be obvious. Second, *causality*: the relationship between chatbot emotional state and behaviour must be apparent. Third, *reinforcement*: the expression of chatbot emotional state must be reinforced using timing and emphasis.

In order to explore the use of chatbot technology in the context of emotional labour, I created a chatbot that addresses questions about emotional labour. To find the right balance between software reuse and experimental control, I searched for open source libraries that could be combined and modified according to need. I found that there are many chatbots available in a variety of formats, but the A.L.I.C.E. project stood out as having a large community of developers and a commitment to open standards and open software licenses. The A.L.I.C.E. Artificial Intelligence Foundation publishes the A.I.M.L. (Artificial Intelligence Markup Language) standard (2005), which specifies a format for pattern-matching user inputs to predefined responses. Several A.I.M.L. interpreters are freely available on Internet sites.

In creating the chatbot, I focused on three human computer interface elements: natural language processing, text-to-speech, and animation. For natural language processing, I used the ProgramD A.I.M.L. interpreter because it is free and because it is implemented in Java, making it cross-platform compatible and convenient to interface with a wide variety of other free components. For text-to-speech support, I used the FreeTTS open source Java library. There is still significant research to be done in voice synthesis, which is "often considered to be cold and disagreeable" (Scherer, 2001, p. 144) and the FreeTTS package is no exception; currently, only two medium-quality American male voices are provided. In order to create a friendly and approachable agent to interact with users, I employed graphic design software to create an animated cat. Using these components and resources, I wrote a Java program, entitled CatBot, that allows the user to type questions and listen to responses from the animated, talking cat. Once the program was created, I generated an A.I.M.L. set that would pattern-match questions about emotional labour to answers from readings on the subject.

The final product of this process, the CatBot program, inspired both hope and disappointment. Freely available A.I.M.L. sets created the ability for CatBot to respond semi-intelligently to almost any user input. Further, the A.I.M.L. standard made it possible to enter emotional labour data into CatBot's database in a way that permitted natural responses to emotional labour questions. A typical interaction with CatBot would be:

*User*: Can you help me?

*C(h)atbot*: Yes. What can I do for you?

*User*: Do you have feelings?

*C(h)atbot*: I possess the emotional impressions recorded by my creators. Are all of your thoughts and feelings your own, or are you also the product of a social process?

*User*: Do you have any emotional expectations of me?

*C(h)atbot*: I expect that you have the capacity for emotional experience, regardless of how often you have a chance to explore and express your

emotions. However, I don't expect you to feel any specific emotion at the moment.

*User:* How does technology influence emotion?

*C(h)atbot:* That is an interesting question! On one hand, there is nothing special about technology that distinguishes it from other physical objects in your life. Do you expect your hair brush to influence emotion? On the other hand, technology is becoming such an important part of human life that it can inspire a wide range of emotions from suspicion to boredom to delight, depending on how much you understand and enjoy technology.

*User:* I would like help with emotional labour.

*C(h)atbot:* I am fairly knowledgeable with respect to current research on emotional labour and I will try to answer your questions.

*User:* I am a teacher and I am expected to perform emotional labour.

*C(h)atbot:* Teachers are quite likely to suffer the ill effects of emotional labour. Working with students may often require that you suppress your own emotions in order to set an example or in order to manage the classroom. This can result in a sense of frustration or loss of ability to express your emotions in non-work situations. You can combat the effects of emotional labour by understanding it and through the support of your colleagues. You might be surprised to learn how many of your co-workers are effected by the consequences of emotional labour.

However, I was somewhat disappointed by the performance of the FreeTTS library. While living up to its promise of free text-to-speech, the available voices were too mechanical to inspire a sense of personal connection with CatBot. Similarly, my artistic skills limited the quality of CatBot's animation interface, making it humorous at best (Figures 1-3). Despite these limitations, I believe that CatBot's ability to answer emotional labour questions in some depth demonstrated the potential for application in a professional context.



Figures 1-3. The CatBot user interface.

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### *Conclusion*

If, for many teachers, emotional labour is a daily problem, a reality of the classroom environment, required by professional standards, the expectations of school administration, and the needs of students, then intelligent agents represent a possible antidote. A chatbot is not only capable of acting as an in-depth resource for emotional labour; as a relational artifact, it is capable of satisfying emotional desires of the user. This reveals the greatest attribute of an intelligent agent— it is an inexhaustible, devoted companion, which is best explained by the chatbot itself:

*User:* Can you suffer from burnout?

*C(h)atbot:* Speaking literally, to burn out is to use up available fuel. I think that any intelligent being can exhaust, misplace, be deprived of, or contaminate its source of fuel— the desires, dreams, principles, and motivating factors that cause you to act. However, without the capacity for change, I think that I will not burn out unless you unplug my power cord.

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