States, Traits, and Dispositions: The Impact of Emotion on Writing Development and Writing Transfer Across College Courses and Beyond

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Abstract: Drawing from a five-year longitudinal data set following thirteen college writers through undergraduate writing and beyond, we explore the impact of students’ emotions and emotional dispositions on their ability to transfer writing knowledge and on their overall writing development. Participants experienced a range of emotions concerning their writing, but those emotions could be broadly categorized as generative, disruptive, or circumstantial. Students managed these emotions in different ways, with some approaching their learning less emotionally (rational interpreters), others more (emotional interpreters), and a final group using metacognitive practices to manage their emotions (emotional managers). Our results suggest that metacognitive concepts of monitoring and control are keys to students’ navigation of the complex emotional landscape of writing in higher education. Our discussion posits ways that faculty can help students become emotional managers and work with students’ emotions in the classroom, and it suggests further avenues for research.

Introduction

We didn’t anticipate we would study emotions. We set out to understand how students learn to write across a five-year period, following thirteen students as they encountered various writing situations and examining how they discussed their writing and learning and how they engaged in writing transfer. Then we met Alice, whose writerly development was strongly tied to her emotions, and Abby, who carefully monitored and changed her behavior to avoid negative emotions. Despite the fact that none of the questions in the study were explicitly geared toward students’ emotions, the emotional connection to learning and transfer became an important part of these students’ stories. Further, in the broader landscape of higher education, many commentaries have recently been published discussing students’ “trigger warnings” and “lack of emotional resiliency” for common college stressors (Gray; Wilson). Given the exigency of emotions in higher education, then, the question of how emotions impact writing development and transfer is a critical one.

One of the foundational assumptions in educational systems is that knowledge, processes, and skills learned in one context will be transferred, adapted, transformed, or built upon in new contexts. That is, over time a single learner engages in a trajectory of literate development that builds on and interacts with previous learning. While researchers call this term “transfer,” we recognize that this term is an inadequate metaphor for the messy reality of learning that involves not just knowledge or skills but dispositions, identities, and social and cognitive processes. Despite the contention of the term, in the last decade writing researchers have begun to carefully tease out the mechanisms that drive students’ writing transfer or lack thereof. While substantial attention thus far has been focused on prior knowledge, genre knowledge, pedagogies, and thinking processes surrounding transfer (Rounsaville, Goldberg and Bawarshi; Beaufort; Robertson, Taczak and Yancey; Wardle; Driscoll; Downs and Wardle), research into the personal, internally held characteristics that students bring into learning situations—including their emotions—is much less defined.

One way that such personal characteristics have been addressed recently is through a growing interest in dispositions, which are the internally held characteristics, like self-efficacy or persistence, that students possess and that manifest in learning environments (Driscoll and Wells). The question of how these internal characteristics impact
learning and writing transfer is still very much underexplored (Wardle; Driscoll and Wells). This is likely for several reasons: first, internal characteristics are difficult to observe and directly measure; second, they are wide ranging and each deserving of careful examination; third, the criteria for classifying a disposition are debatable; and finally, the question of uncovering what’s going on in our students’ heads may, frankly, terrify us.

The present study examines how temporary emotional states, persistent emotional traits, and students’ overall emotional dispositions (our term, see below), occur in students’ writing experiences over a five-year period. We explore how these emotions impact students’ ability to transfer learning across college writing contexts while influencing their writerly development.

Role of Emotion in Learning and Writing Transfer[1]

Composition research has a long history of privileging students’ social processes over cognitive or emotional ones (Driscoll and Wells). And yet, more broadly, failure to learn or succeed in school has been largely attributed to aspects of academic preparation rather than more nuanced features, such as emotions (Christie et al.). In the last decade, however, researchers from cross-disciplinary fields have begun to tease out the relationship between education and emotion. Recent learning research suggests that students’ emotional connections to the material and instructor constitute a critical factor for success (Scherer; Efklides and Volet). Positive emotions, such as liking or excitement, have been shown to improve students’ academic achievement and learning over time (Efklides and Volet; Linnenbrink-Garcia and Pekrun), while negative emotions such as hatred or frustration have been shown to be largely detrimental (Pekrun). Positive emotions have also been shown to facilitate transfer of learning while negative emotions have been shown to hinder transfer, although none of these studies have examined writing (Brand, Reimer, and Opwis; Harper and Mayer; Gegenfurtner). Research has also shown that teachers play a role in constructing environments that are safe and foster positive emotions, but teachers are often unaware of this impact (Markopoulou). Limited research in composition has highlighted how positive emotions can impact students’ ability to learn how to write, although long-term transfer and development have largely not been considered (Brand; McLeod). Negative emotions have been explored in terms of students’ rhetorical abilities (Quandahl; Stenberg) and in assisting students in overcoming failure in a writing classroom (Gross and Alexander).

Given the few studies on emotions, a gap exists in the research on the role of emotions and emotional dispositions in long-term writing development and writing transfer. The connection to emotion, however, appears to be implicit in several studies examining transfer. One of the most thorough examinations of emotions and learning development is Herrington and Curtis’s Persons in Process, which explored upper-division students’ development of literate identities tied clearly to the development of a sense of “self.” Herrington and Curtis found that writing had “much less to do with any particular sequence of writing tasks or teaching methods than with how students felt they were expressing themselves and being responded to as people” (13). Their work makes a strong case that, for the four students studied, emotions matter a great deal in response to writing challenges and, potentially, for long-term development and transfer. Building on this previous work and addressing the gaps noted above, our study examines how emotions impact thirteen students’ transfer of learning and long-term literate development.

Core Concepts: States, Traits, Dispositions, and Metacognition

The research on writing transfer and emotions presents us with a number of concepts that we have interwoven to present a comprehensive picture of the role of emotions in writing transfer. This section provides working definitions of the following: state and trait emotions, emotional dispositions, generative and disruptive aspects of emotion, and metacognition.

*Emotional states.* In a synthesis of the literature on emotion, Scherer suggests that emotions are “episodes of coordinated changes in several components . . . in response to external or internal events of major significance to the organism” (139). Emotions are typically considered as episodic “states” in that they occur for a fixed duration of time and occur because of a specific “triggering event,” which can be either externally driven (a bad grade on an assignment) or internally driven (making an association with previous negative experiences). While many equate “feelings” with emotions, according to Scherer feelings are the “subjective experiential components” to an underlying emotional state (139).

*Emotional traits.* Researchers examining emotions have long distinguished between a “state” and a “trait” (Spielberger et al.). An emotional “state” is a single, temporary emotional condition; a psychological “trait” is a persistent and stable emotion felt consistently over time. A comparison helps illustrate the difference: a student has emotional anxiety during one assignment because she is faced with what she perceives as an insurmountable writing
challenge versus a student who has anxiety about every writing assignment that she has to complete. In the first example, the student is experiencing a temporary emotional state due to a particular circumstance; in the second, the student experiences the same emotional trait in each situation. Scherer concludes that psychologists now have consistent evidence showing that these traits can have “powerful effects on cognitive processing of various types,” including “memory, learning, thinking, and judgment” (155).

**Emotional dispositions.** A third category, and one that we define for this study, is emotional disposition. In drawing upon the dispositional literature in transfer studies, dispositions, more broadly, are “not intellectual traits like knowledge, skills, or aptitude, but rather determine how those intellectual traits are used and applied . . . dispositions determine students’ sensitivity toward and willingness to engage in transfer” (Driscol and Wells). Emotional dispositions are not about specific emotions but rather indicate how emotions are managed across many situations; they are the long-term orientation of emotions connected to writing (and more broadly, learning). We will explore these emotional dispositions in depth and show how students’ emotional dispositions help facilitate or hinder transfer.

**Generative and disruptive emotions and dispositions.** In addition to understanding whether dispositions or emotions are present, we draw upon two categories from the writing transfer literature: generative and disruptive, as established by Driscoll and Wells. Since these concepts have been key to studying transfer-related dispositions, we have applied them to our study of state and trait emotions and emotional dispositions. Generative emotions can enhance a student’s writing process, relationship to writing, writing knowledge, or writing performance short term or long term. Generative emotions are those that facilitate the student’s positive growth and development. In our study, these were read within the context of an individual student’s experience to see what outcomes were generated. Disruptive emotions can disrupt and interfere with a student’s writing and learning processes and, again, are read contextually.

**Metacognitive monitoring and control.** A final set of concepts from writing transfer were also critical for the present study: the broad theory of metacognition and two of its subcomponents, monitoring and control. These have recently been explored by various authors, including Gorzelsky et al., who developed a taxonomy of metacognition for writing transfer research. Monitoring occurs when students actively evaluate their efforts concerning a task; control occurs when action is taken as a direct result of that monitoring. As we’ll explore further, metacognitive approaches can have an emotional basis and be critical to understanding students’ emotional dispositions.

**Research Questions**

Through an analysis of students’ interviews and written texts over a five-year period, we explore how emotions may influence writing transfer and writing development. One of the key aspects of studying emotions’ relationship to writing transfer is to do so in the context of that learning rather than as separate from it (Efklides and Volet). For that reason, we employed a longitudinal, mixed-methods approach. Our research questions are the following:

1. How frequently do emotional states occur in students’ writing experiences over five years?
2. How do emotional states and traits impact students’ long-term development as writers and their ability to directly transfer writing knowledge and skills?
3. What are students’ emotional dispositions with regard to their writing? What are the implications of emotional dispositions for writing development and transfer?
4. What other emotional factors impact writing development over five years?

**Methods**

**General Procedures and Participants**

This study took place over a five-year period at a mid-sized, doctoral-granting institution in a large Midwestern metropolitan area. After we gained IRB approval, we asked a randomly selected group of faculty teaching in the first-year writing (FYW) program (~ 3,000 students per year) to allow researchers to access their classes. Dana (author one) and two trained undergraduate research assistants visited twenty-five sections of FYW once during the first and last two weeks of the semester to distribute surveys on writing transfer (not included in this study). Students were asked to provide contact information for follow-up interviews. The participant pool included 468 students: 29 developmental writing students, 342 Composition I students, and 97 Composition II students.

Interview participants for the longitudinal portion of the study were recruited via email during the Spring 2011 semester. One student was randomly selected from each of the 25 sections; 70 percent of the students contacted (N...
Initially agreed to participate. Two students' schedules would not allow time for interviews, which left 18 participants for Year 1 (Y1); attrition and loss of life reduced the participants to 13 for the remainder of the study. Participants (five males and eight females) were interviewed at the beginning of their second semester and each year thereafter. Participants represented various ethnicities (Hispanic [1], second generation Finnish [1], generation 1.5 Russian [1], and Caucasian [12]) as well as a range of majors. These demographics are consistent with the broader campus population.

Dana conducted sixty-minute semi-structured interviews focused on learning to write, writing in various disciplines, and transfer of learning. Students brought two pieces of writing to each interview; they were specifically asked to bring a piece they felt was “easy” and one that was “challenging.” They then described processes for and experiences with the writing. Students were compensated $20 per interview. Follow-up interviews during subsequent years asked students the same questions to allow for comparisons over time.

**Interview Coding and Analysis**

In order to engage in a study that is replicable, aggregable, and data supported, we took a systematic approach to coding and analysis informed by the work of Haswell, Smagorinsky, and Saldaña. We, the co-authors, both independently read through the interviews and noted themes, performing a round of initial, open coding (Saldaña). We created a coding glossary rooted in Pekrun’s achievement emotion taxonomy, an empirically based taxonomy for learning and emotion (see Appendix). Drawing upon the writing transfer literature and noting themes in the data, we also included metacognitive codes and writing-specific codes about self-reported transfer and teacher involvement, as well as a list of emotions themselves, based on words students used in interviews (e.g., frustrated, excited). To code for emotional traits, because we read student interviews in order, we were able to determine which emotions were tied to emotional traits (which we defined as more than three successive experiences). Emotional dispositions, as a concept, emerged from broader patterns in the data.

We read through one full set of interviews together, making refinements to the coding glossary and collaboratively coding using Smagorinsky’s method that recognizes that codes are co-constructed and evolving. After we finalized the glossary, we calculated inter-coder reliability by independently coding one full interview; halfway through the coding process, we again calculated inter-coder reliability on one full interview. We then divided the sixty-three interviews and individually coded half the interviews using Dedoose Mixed Methods Research Software. We met weekly during coding to discuss our coding notes and broader themes.

**Writing Sample Coding**

Drawing upon Smagorinsky’s techniques, we collaboratively coded all writing samples (N = 173) to understand broader patterns of writing development and writing transfer. We first read through student writing individually, noting themes. Collaboratively, we examined each student’s body of writing, exploring audience, genre, context, and style and how those issues were rooted in the conversations that students had about their process and the specific text. We coded what students reported transferring or not transferring, and we compared those reports to the development of their writing from draft to revision and from assignment to assignment. Therefore, our measures of transfer include self-reported and direct transfer.

**Data Analysis**

To analyze our data, we calculated code counts and code co-occurrences (how often two particular codes showed up at the same time). Counting codes and supplying overall themes is an approach strongly advocated by Smagorinsky to ensure accurate representation of the qualitative data. In addition, we used our coding notes and overall coding counts to categorize the different ways that emotions impacted student learning development and transfer. As emotional dispositions emerged as a strong theme, we selected one student from each of the four categories as a representative based on representative experiences, gender, socioeconomic status, ability, relationship with writing, progress to degree, and major.

**Results**

In this results section, we describe our findings from each of the research questions with illustrative examples from four of the students enrolled in the study. We begin by presenting the big picture of emotions and transfer in questions 1 and 2, and then provide stories and lived experiences of students in questions 3 and 4.
Q1: How frequently do emotional states occur in students’ writing experiences over five years?

Our results indicate that students experienced a larger range of disruptive emotions (31 different kinds) than generative emotions (12 different kinds). However, students reported generative emotions more frequently (701 occurrences) than disruptive emotions (599 occurrences). While the frequency and range of emotions varied, both kinds of emotions experienced a spike in occurrences during year four when the bulk of participants were either graduating, engaging in challenging Writing Intensive courses, or planning to attend graduate school. Table 1 highlights the development of key emotions that impact learning and transfer over time (see Q2).

Table 1. Key Emotional States of Students over Time

<table>
<thead>
<tr>
<th>Category of emotion</th>
<th>Top three emotions in each category</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive impact in learning environment</td>
<td>Like</td>
<td>38</td>
<td>28</td>
<td>72</td>
<td>116</td>
<td>19</td>
<td>273</td>
</tr>
<tr>
<td></td>
<td>Confidence</td>
<td>18</td>
<td>26</td>
<td>12</td>
<td>16</td>
<td>7</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Enjoyment</td>
<td>6</td>
<td>30</td>
<td>24</td>
<td>28</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>Disruptive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative impact in learning environment</td>
<td>Boredom</td>
<td>4</td>
<td>8</td>
<td>10</td>
<td>20</td>
<td>4</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Hate</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>16</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Fear</td>
<td>4</td>
<td>2</td>
<td>8</td>
<td>12</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>Circumstantial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Either positive or negative impact in learning environment</td>
<td>Frustration</td>
<td>20</td>
<td>28</td>
<td>16</td>
<td>36</td>
<td>16</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>Anxiety</td>
<td>20</td>
<td>14</td>
<td>20</td>
<td>8</td>
<td>15</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Confusion</td>
<td>12</td>
<td>16</td>
<td>4</td>
<td>32</td>
<td>12</td>
<td>64</td>
</tr>
</tbody>
</table>

Q2: How do emotional states and traits impact writing development and transfer?

Each student in our study had a range of writing experiences, and each of those experiences may have had an emotional state or trait attached. The nature of that emotion may have impacted the student only for the particular assignment (disrupting their process or encouraging it), or that same emotion may have had long-term impact well beyond that particular occurrence in terms of transfer. Some emotional states—generative and disruptive—impacted students only at a particular point in time for a single writing activity and don’t seem to have had lasting impact. Other emotional states or traits, however, had tremendous long-term impact that persisted over a period of years and that directly impacted students’ ability to transfer as well as their writing development. Based on code co-occurrences and cross-referencing with students’ written works, we were able to ascertain which emotions were most impactful on short- and long-term learning and transfer. The following chart describes specific emotions and how they impacted learning environments for our students.

Table 2. Emotions, Transfer, and Writing Development

<table>
<thead>
<tr>
<th></th>
<th>Short-term learning Specific for assignment or course</th>
<th>Long-term learning Impact on writing development and transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generative</td>
<td>Confidence, excitement, fun</td>
<td>Confidence, enjoyment, fun, gratitude, happy, like, passion, pride, surprise, determination</td>
</tr>
<tr>
<td>Disruptive</td>
<td>Confusion, dislike, boredom, fear, hate</td>
<td>Boredom, fear, hate</td>
</tr>
<tr>
<td>Circumstantial</td>
<td>Anxiety, frustration, nervous, overwhelmed, stressed, uncertainty</td>
<td>Anxiety, frustration, nervous, stressed, dislike, (overcoming) confusion</td>
</tr>
</tbody>
</table>
As Table 2 describes, positive emotions such as confidence, excitement, and liking were generative and positively impacted immediate writing experience and led to long-term writing transfer. These emotions often also led to other kinds of positive writerly development: positive attitudes towards writing, self-identification with being a writer or good writer, and/or a deeper value of writing. “Liking” something was the strongest indicator of short-term generative emotions, and “liking” remained a key indicator of transfer along with confidence, enjoyment, and pride. In a nutshell, if students like the writing they are doing, if they take pride in it and feel confident about it, they have a much higher chance of carrying that knowledge with them.

Negative emotions in the learning environment present much more complexity. Some emotions, particularly boredom, fear, and hate, were never generative for our students, disrupting students’ writing processes and written products in the short term. In the long term, these three emotions actively inhibit transfer. Students often referred back to situations where these emotions were present strongly and actively reported refusal to transfer; their written products reflected this reality (see Q3, below).

All students in the study experienced other negative emotional states towards writing that we call “circumstantial.” These emotions include dislike, anxiety, confusion, frustration, nervousness, feeling overwhelmed/stressed, and uncertainty. These states could be either generative or disruptive in the short and long term. How this played out for students, specifically, had to do with students’ emotional dispositions (Q3) and students’ abilities to manage and/or actively overcome several “negative” emotional states (Q3 and Q4). Dislike was always disruptive for students in the short term (often leading to procrastination and poorer writing performance), but when students talked about their writing development in the years following the incident they disliked, sometimes this difficult situation ended up teaching them a great deal about writing that they were able to explicitly transfer to new writing situations. [7]

Q3: What are students’ emotional dispositions towards writing? What are the implications of emotional dispositions for writing development and transfer?

For every student in the study, emotional moments occurred. However, as we began to explore in Q2 above, the frequency, depth, and long-term impact of emotions on students’ writing development and writing transfer differed substantially. Throughout the sixty-three interviews, each of the students was asked a very similar set of questions; some students responded to almost every question emotionally, while others provided more dispassionate responses. Each individual student’s responses were extremely consistent between their different interviews in the study, indicating to us an underlying disposition towards emotion. Among our 13 participants, we found three distinct dispositions towards emotions—emotional interpreters, rational interpreters, and emotional managers—and a fourth group of students who did not fall cleanly into any category. Our dispositional categories [8] are as follows:

**Emotional interpreters.** Emotional interpreters are those who feel their way through their college writing experiences. These students experience and explain their choices, self-assessments, and writing development using emotional language. Writing ability did not seem to impact whether or not a student was an emotional interpreter, as both strong and weak writers fell into this category; rather, this was a broader emotional disposition through which they experienced their academic lives. [9]

Emotional interpreters regarded faculty as having the same emotionally based orientation toward grading and feedback. For example, one of our emotional interpreters, Bobby, is an English education major and self-professed “good writer.” In any given year of the study, each time Bobby described faculty members’ interactions with his writing, he spoke about how faculty “like” or “dislike” his writing, and he believed that like/dislike largely determined his grade. For example, in his third year interview he said of an English professor, “She really liked my writing style; she said I was a good writer, but there was a passage identification thing and that’s not my strongest suit in English.”

Emotional interpreters may have an overall generative or disruptive approach to their emotional interpretation. Of the four students (30 percent) who fall into this category, two demonstrated mostly disruptive emotional reactions toward writing (with accompanying emotional states of anxiety, confusion, fear, dislike, hatred), one entirely generative (confidence is a state emotion for this student), and two showed a mix of generative and disruptive, largely dependent on the faculty and context. The student who fell on the generative end was academically well-prepared and had only minor struggles with writing in the five years of the study. However, the remaining three emotional interpreters in the study had emotional breakdowns and emotional intensity concerning their writing at several points—all of which had profound implications for transfer.

We now describe an extended case of an emotional interpreter, Alice, and how her emotional disposition directly determined her long-term writing development and writing transfer. Specifically, Alice’s strong emotions prohibited
transfer at several key points and facilitated it at others. Alice was an undergraduate psychology major for four years and in her fifth year of the study was enrolled as a master’s student in counseling. Although she performed well as a writer and received generally high grades, she had high anxiety (a trait) about writing due to lifelong struggles with dyslexia. Experiences from her childhood and adolescence imprinted negative emotions surrounding reading and writing and led to her resistance and unwillingness to seek help.

In her freshman year, Alice had a very positive experience with her first-year writing professor, whom she took for both Comp I and Comp II. Each year of the study, she talked about information she learned from him and directly demonstrated her use of that information in her writing, particularly in APA style, research strategies, source integration, and organization; this transfer was clearly represented in her writing itself and was reflected in the way she discussed her writing in interviews. A good deal of this transfer occurred because Alice felt supported and nurtured in her FYW courses.

However, Alice also demonstrated at least three distinct points in the study where her strong negative emotions prevented successful transfer of key writing or genre knowledge: in this specific example, a psychology research methods paper (2nd year) and a subsequent women’s studies research methods paper (3rd year). In her second year, Alice took a 200-level psychology research methods course. She became emotionally disconnected due to “not being able to connect with the professor,” a quality key for her overall success as a student. She said, “I felt a little overwhelmed because I was doing bad in the class and maybe the stress of that was hindering my learning process." In her struggle to write a successful methodology paper, she reached out to the professor via email but did not receive a response that she found helpful. When Dana asked about attending the professor’s office hours or seeking other help, Alice said, “No! I already put myself out there. I already put myself in a vulnerable position and that was enough. From now on, I will just slap this together and do the best I can.” At the end of the course, Alice discussed not only rejecting the professor’s teaching style but also the material, saying that she was “more comfortable with the emotional stuff” (counseling) and that she wanted nothing to do with research psychology.

In her third year, Alice took a 300-level research methods course, this one for her minor in women’s studies. She had to write a nearly identical assignment where she needed to propose an empirical methodology, in selecting her methods and topic for the paper she stated, “I could have chosen any of the methods and I chose interview . . . I didn't like quantitative; I didn't want numbers. I wanted real-life people telling me what they think.” However, in rejecting psychology’s methodologies, she also rejected methodological genre knowledge that would have helped her write. Alice used none of the structures taught to her in the previous course, and only through extensive teacher feedback on her draft (included in the study) was she able to revise and provide the necessary information similar to how she did the previous year. When Alice was asked what knowledge she transferred, she referred back to her Comp I and II courses and another women and gender studies class she liked: “In both of our [FYC] classes, we learned, we had a tutorial in the library. Then, with my last women and gender studies class, the one where I wrote the interview for, we had another tutorial.” But she indicated the research class was not useful. In fact, in that same third year interview she noted that she learned nothing about writing in her psychology courses: “The most advice we ever get that I’ve noticed is everyone just go to Purdue OWL.”

In this example, we can see the impact of both negative and positive emotions on a specific writing experience and subsequent transfer; positive emotions from FYW and a previous women and gender studies course allowed for conscious use and adaptation of formatting, process, and genre knowledge, and the negative emotions wrapped up in the psychology course meant that methodological and genre knowledge were not only not transferred but actively disregarded, despite the similarity in task and genre. This was present both in what Alice said and in her writing samples.

Rational interpreters. Rational interpretation, our second kind of emotional disposition, falls on the other side of the spectrum. These students rarely describe learning experiences in emotional terms and do not appear to have a strong emotional reaction to their learning, even in the face of substantial difficulty. These students’ emotional states do not appear, from our students’ self reports and their writing, to show a short- or long-term impact on writing development or transfer. Three of the students (23 percent) in the study fall into this category.

For example, Aaron is a rational interpreter who rarely reacts to situations in an emotional way. Even in the face of extreme difficulty, he described issues succinctly and without embedded emotion; he discussed faculty members’ views of his writing in the same rational way. Aaron went through several majors in the health sciences while enrolled in the study. He ultimately completed an interdisciplinary major focused on health and sports management. Aaron is also a lifelong athlete, and after graduation he continues to work as a swim instructor.

In his fifth year, Aaron completed a degree in integrative studies and took a capstone course in which he had to write a research-based analysis of his internship experience. Aaron was asked to engage in a task that was substantially
longer and much more intellectually complex than anything he had ever done, and he discussed this in his interview. Although he struggled with the writing, he had no negative emotions or experiences during this process. He described the struggle: “it was the literature review; one of the drafts of it. It was very much chunked up because the way I was doing it, I would find a source in it, type up about the source. And then I'd work on the next chunk maybe at a different time and I didn't really have time to smooth...” In overcoming this “chunkiness” problem, in addition to using the feedback from the professor, Aaron described a reading aloud strategy gained from previous semesters: “From my science classes where I was doing more of this research-based kind of papers... I feel some of my proofreading checks I never did, but now, I need to read it out loud or read it to somebody aloud.” This was a strategy for revision that Aaron developed and directly transferred into this assignment. In describing his teacher’s grading for this paper, he said, “It was just really more based on you learning something rather than ‘you need to turn this in and get this grade.’ Particular with the paper, she helped me out a lot. I'd send her drafts and she's like, ‘no, this isn't what I wanted, try again.’” Compared to Bobby’s discussion of teachers “liking” his work above, Aaron’s assessment is less about liking and more about what a professor is looking for.

Aaron was not only learning new ways of writing in his senior capstone but also drawing upon what he had learned in previous courses, particularly science courses—courses toward which he also had neutral emotional reactions. In this example, emotions did not play a notable role, nor did they appear to have played a role in almost any of Aaron’s other key writing development experiences. He struggled and succeeded as Alice did, but he did so without the emotional interpretation.

**Emotional managers.** A third emotional disposition in the study, represented by two students (15 percent), is the emotional manager. These students have worked hard to master their emotional responses through two mechanisms: metacognitive monitoring (where they carefully monitor situations and assess their potential challenges) and metacognitive control (where they change their behavior to avoid unpleasant emotional states). Typically, this means avoiding unpleasant experiences before they happen through specific strategies, like not procrastinating, seeking help, managing their time, and being dedicated to their studies, but it may also mean managing negative emotions that can’t be avoided by changing behaviors. While we see all of the students in the study moving toward more emotional management as the study progresses (see Q4 below), the emotional managers are masters of metacognitive monitoring and control and consistently showed this pattern throughout the study.

One emotional manager, Abby, is a pre-med student who graduated in four years then took a year off to apply to medical schools (and in her sixth year is pursuing graduate study in a related field). She demonstrated mastery of her emotions throughout the study from the beginning, usually engaging in substantial amounts of what Reiff and Bawarshi call “not talk,” where she talked about “not wanting to get overwhelmed” in her writing. Here, Abby in her third year described some strategies she had developed for writing papers:

Dana: What do you think you’ve learned over the course this last year about being a good student?

Abby: I've always thought I've been kind of a good student. I've never slacked off and all that kind of stuff. In fact, I’m kind of like the opposite I think of most people... I felt that doing one thing at a time really helps. And keeping the stress level down. If you have to write a paper, start it if you can for a couple of hours, and then take a break and go back to it later. I think that being a good student is doing what you have to do but not freaking out about it.

As we see in this example, Abby monitored writing and took specific steps to avoid negative emotional consequences (“not freaking out”). This helped her be an extremely successful student throughout her career, and it encouraged her to develop key writing strategies.

**Those in the middle.** A final group of students (4 students, or 30 percent) exhibited features of all of these categories at various points in the study. These students did not have the careful or consistent attention to emotion that emotional managers did, nor did they have the primary approaches of the rational managers. They occasionally emotionally interpreted but not with the consistency of those in that category. We did see these students moving strongly towards emotional management in the last two years of the study, which we’ll explore next.

**Q4: What other emotional factors impact writing development over five years?**

In relation to students’ emotional dispositions and emotional management, we found two additional factors: metacognitive regulation and the role of faculty.

**4A. Emotional management through metacognition as key to long-term transfer.** As described above, how students monitored their emotional states and engaged in direct actions to avoid negative emotional effects also helped facilitate long-term writing transfer. This monitoring and control is epitomized in the “emotional manager” category but
was also done by others in the study, though less frequently. In the first four years, when all participants were enrolled as students, they gained the ability to metacognitively monitor and control for emotions. In the fifth year of the study, only half of the students remained enrolled as undergraduates, which can account for less monitoring and control; over half of them were no longer writing academically (see Table 3).

Table 3. Control and Monitoring Experiences of Students

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>12</td>
<td>48</td>
<td>30</td>
<td>72</td>
<td>16</td>
<td>178</td>
</tr>
<tr>
<td>Monitoring</td>
<td>14</td>
<td>28</td>
<td>20</td>
<td>56</td>
<td>8</td>
<td>126</td>
</tr>
</tbody>
</table>

Metacognitive monitoring and control helped drive long-term development for students in the face of typical writing-related emotions. Monitoring is an evaluative process on the part of the student, where one’s efforts and progress are considered; control refers to the actions that one directly takes in response to monitoring. Students can be highly metacognitive and monitor themselves without ever actually taking steps to solve the problem and engage in control. Two examples help illustrate this distinction. Alice, in discussing a difficult writing experience in her second year, said the following:

Last semester, it was like “go do fun stuff, go do homework”; I chose the fun stuff. It was my own fault. It was my responsibility and I learned that you need to ask for help if you need it . . . I don’t like asking questions in class because I feel everyone else can understand and I’m the only one who does not. You feel vulnerable. It’s like I’d rather go home, hit the books and try to figure it out myself.

This is a clear example of a time where monitoring was taking place, but Alice’s disruptive emotions (pride, vulnerability, feeling overwhelmed) prevented her from seeking the help she needed to effectively complete a writing assignment (control).

In a second example, we can see control at play in emotional interpreter Bobby’s performance on essay exams in his third year: “And I got like a 3.1 or 3.0 [out of a 4.0] . . . I felt horrible. I was trying to be at least above 3.5. So I got kind of dejected. I worked really, really hard and I got a 4.0 on the second exam.” This is an example of emotionally based control because Bobby feels horrible after receiving what he deems to be a poor grade. Therefore, he controlled his behavior by studying more and actively changed his situation for a better outcome.

4B: The role of faculty in emotions and transfer. Emotions towards faculty play a substantial role in short-term success and long-term transfer and in writer development. Emotions we identified as generative in Table 2 (liking, pride, or happiness) frequently occurred with positive emotional states towards faculty. On the other hand, negative emotional states towards faculty frequently disrupted transfer (see Figure 1).
Students’ positive emotional states towards faculty occurred much more frequently with experiences that proved generative in the short and long term, specifically those that contributed to students’ overall success and development of a writerly identity. When a student in this study had a positive emotional experience with a faculty member, then that student was very likely to have a short- (and possibly) long-term generative experience that positively impacted his or her overall development. For example, Abby felt her teacher created a positive learning atmosphere that was conducive to her learning how to write, which then encouraged and facilitated her overall writerly development and writing transfer in years to come. The same was true for negative emotional states and disruptive experiences. If a student in this study had negative emotions towards a faculty member (as in the example of Alice), then that experience was very likely to hinder transfer.

In addition, the impact of faculty varied greatly based on emotional disposition. Faculty had the largest impact on the emotional interpreters, in both positive and negative ways. Table 4 shows this impact:

Table 4. Generative and Disruptive States Towards Faculty

<table>
<thead>
<tr>
<th></th>
<th>Generative emotional states toward faculty</th>
<th>Disruptive emotional states toward faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional interpreters</td>
<td>37 instances</td>
<td>29 instances</td>
</tr>
<tr>
<td>Emotional managers</td>
<td>15 instances</td>
<td>10 instances</td>
</tr>
<tr>
<td>Rational interpreters</td>
<td>5 instances</td>
<td>6 instances</td>
</tr>
</tbody>
</table>

Emotional interpreters experienced the highest occurrences in both generative emotional states towards faculty and disruptive emotional states towards faculty, followed by emotional managers and, lastly, by rational interpreters.

Discussion and Implications

This study has presented a complex view of emotions that is quite intuitive. Students experience a wide range of emotions concerning writing, and their ability to manage, interact with, and mitigate emotions within their writing processes is key—for some—for their long-term development and ability to transfer. What this study has provided are the long-term implications to seeing students’ emotions at play in an individual learning space.
Writing Transfer and Emotional Dispositions

Recent research on transfer helps explain our findings on the emotional impact of transfer. Perkins and Salomon recently posited three "bridges" for transfer that require students to detect connections across learning contexts, elect to make connections across learning contexts, and connect the material learned in one context to a new context (250). This model suggests that transfer of most complex academic tasks, including writing, requires conscious effort on the part of the student (250-51). Alice’s example fits well here: for her, emotional experiences were what largely drove her to detect, elect, or connect her learning—or choose not to do so. For others, like Aaron, this is much less the case. The importance of students’ overall emotional disposition here matters—it matters in what they transfer, it matters for their metacognitive processes, and it matters in how they experience faculty interactions. While emotional dispositions are not static qualities, they weave themselves through many students’ writing experiences over time.

While our findings suggest that certain emotions can clearly hurt or help transfer and long-term development, the impact of circumstantial emotions such as frustration, anxiety, dislike, and confusion depends on the student’s emotional management, shaped by his or her previous experiences with learning and writing. Alice, an emotional interpreter, has a learning disability and therefore struggled with her identity as a writer and had difficulty seeking help. One of the circumstantial emotions, frustration, caused a substantially disruptive impact throughout Alice’s years in college; thus, she was unwilling to transfer her learning from one context to the next when she experienced these emotions. On the other hand, Abby, an emotional manager, actively employed strategies to avoid frustration: seeking help, starting early on a draft, or employing de-stressing techniques. Frustration to Abby could still lead to productive transfer, while frustration for Alice rarely did so. Lastly, Aaron, a rational interpreter, wasn’t greatly impacted by frustration at all. His experiences as a Division 1 athlete prepared him to approach frustration as just a part of the process (something we confirmed recently during his sixth-year interview). While all three students encountered frustrating writing experiences, all handled them differently and had different outcomes in terms of transfer. The impact of their lived experiences helped contribute to their underlying emotional dispositions and ability to transfer knowledge from circumstantial emotional situations. This reaffirms the importance, both in teaching and in research, of better understanding how students’ past personal and educational experiences shape their current identities as writers and how those experiences facilitate—or inhibit—transfer. We call upon future researchers interested in transfer to continue to explore the role of student dispositions and identities.

We now turn to two key areas that have implications for teaching writing and fostering long-term transfer: facilitating positive emotions in the writing classroom and teaching students how to be better emotional managers.

Facilitating Positive Emotions in the Writing Classroom

Faculty members play a major role in helping students to foster generative emotions towards writing and to learn how to better handle the inevitable negative emotions that occur. One approach, developed by David Hanauer, cultivates students’ passions through “meaningful literacy instruction” (108). This type of instruction orients the learner as a socially and culturally contextualized individual and learning as “…a process of widening and deepening the ways an individual can understand, interpret, feel and express her or his personally meaningful understandings to themselves and within social settings” (108). While Hanauer’s work focuses on language learning specifically, this type of instruction could be very beneficial for FYW, especially for emotional interpreters. One way this might manifest itself in the classroom is through cultivating more freedom in writing assignments, which may encourage personal investment in writing. A second approach is through critical pedagogy, which encourages working with students’ lived experiences and understanding how their attitudes and emotions towards writing, schools, and learning are affected by their language, race, ethnicity, and class background(s) (Delpit; Ladson-Billings and Tate). Both of these pedagogical approaches attend to students' identities and passions as writers, and both can help facilitate positive emotional experiences in the FYW classroom.

Another approach is to help students reframe prior negative emotional situations to develop emotional management, and we believe this can be done in FYW in a myriad of ways. An assignment that Dana frequently uses with her developmental writers is to have them write about a writing situation in which they struggled and currently view negatively (a very common lived experience in a developmental writing classroom), and to revisit and rewrite the situation in a more positive light, focusing on what they learned, how they grew, and how they can bring that understanding into their current writing course. This assignment generates much discussion and allows students to develop a more productive relationship with challenging writing-related emotions, like confusion and frustration.

Further, we advocate for helping students overcome frustrations, anxiety, and confusion by discussing strategies to manage these emotions. Faculty can have students reflect on past emotions surrounding writing and can ask students to discuss strategies for how to productively deal with these emotions. Writing instructors could model how they overcome these issues and give students some sense of how to deal with the stress of writing and revising.
Further, our day-to-day instructional practices can impact students’ emotions towards writing. One specific way that we saw this reoccurring in our interview coding and writing analysis was through how teachers responded to student writing. We didn’t always have access to faculty responses, but when we did it was telling, especially for emotional interpreters. Faculty, in our study, often gave good feedback from the perspective of improving the draft but not necessarily from the perspective of managing a delicate writer; the effect of this feedback did not always result in generative emotional states. Sometimes, the tone of feedback gave students the perception that their instructor did not like their writing (Alice experienced this strongly in year five, for example). As Connors and Lunsford suggest, we encourage instructors to provide feedback that helps students revise and balances constructive criticism and praise. Writing instructors should consider students’ self-assessments of their emotional profiles as writers when they are giving feedback. The goal should be to help the individual student experience positive emotional states, which can lead to generative experiences and transfer. Ultimately, our feedback can impact students’ relationships to writing, writing knowledge, or writing performance and, therefore, their ability to experience generative long-term development and transfer.

This isn’t to say that all writing experiences should be cupcakes and flowers or that only positive emotions can, or should be a goal, for the writing classroom. Rather, students need a safe space where they can learn to adapt to a variety of emotions. Writing is hard work; it certainly does create a range of circumstantial emotions: frustration, confusion, stress, and more. For students who experienced challenges and “disliked” a writing situation in the short term, many were still able to transfer that knowledge in the long term with emotional management.

**Developing Metacognitive Monitoring and Control**

Metacognitive control is key to mitigating negative emotions’ impact on long-term learning development and writing transfer. Metacognition works in two ways: first, students must be able to recognize an emotionally charged situation (monitoring) and then actively engage in a behavioral and mindset shift (control). Alternatively, students need an opportunity to evaluate what happened in the past, take stock of what they learned, and not let their negative emotions lead to a refusal to transfer (see Dana’s example above). We saw students’ capacity for monitoring and control rising for all participants as the study progressed, indicating that part of metacognition is developmental: as students grow and gain more direct college writing experiences, they are able to more explicitly monitor, control, and reflect. However, we also believe we can—and should—teach students better monitoring and control strategies.

Reflective writing has long been used as a pedagogical method of encouraging metacognition (Yancey, Robertson, and Taczak), and we fully support its use in the writing classroom to help manage emotions, especially over the long term. However, we worry that typical reflective “after the fact” writing, such as the kind of reflective piece that accompanies a final draft, isn’t enough to help students self-regulate emotional experiences in the moment, especially for disruptive emotions (e.g., dislike, hate, fear) and circumstantial emotions (confusion, frustration, etc.) and for emotional interpreters. Although after-the-fact self-reflective behavior does not allow students metacognitive control over something that already occurred, it certainly can allow for future metacognitive control to happen (see Gorzelsky et al.).

Thus, to facilitate better in-the-moment emotional management, we suggest a multi-tiered approach. First, students should be given the opportunity to step back and reflect at various points during the writing process, while emotions can still be managed. This might include video think-alouds, where students “check in” on how they are feeling about their drafts and what they are doing; in-class writing opportunities where faculty and peers can provide direction in one-on-one conferences; or writing center tutorials. We can encourage self-regulation and self-efficacy as part of this process (Driscock and Wells). We also must raise students’ awareness about what a “typical” writing process is like, how good writers get frustrated and also struggle from time to time, and how managing those struggles is part of becoming an expert writer.

Further, students can be taught the concepts of monitoring and control explicitly, and these concepts can be woven into the course in productive and engaging ways. A simple way that Dana teaches students to control and monitor their emotions is by encouraging students to self-monitor for a week in a short series of in-the-moment reflections while they are drafting their papers. This gives students opportunities to identify points of monitoring and control. This activity can be followed up with other activities and reflection throughout the term. Another activity is to engage in the modeling of management of negative emotions. Asking former students or writing tutors to come in and share their learning experiences and how they handled difficult situations (modeling help-seeking behaviors and other regulatory strategies for distress) is useful. Another strategy that Dana has used in her developmental writing classes is the “writing weather report,” where students are asked to give a “weather report” on their writing process at various points. Students’ “stormy” or “hurricane” reports allow for direct intervention and response.
Conclusion: Implications for Transfer of Learning Research

We believe these nuanced findings showing the relationship between students’ emotions and writing transfer provide another facet to our growing understanding of transfer and writer development. For one, these findings help explain at least some of the inconsistencies we see in the previous writing transfer literature surrounding what students transfer, how it happens, and why so many approaches seem so circumstantial (see Bergmann and Zepernick; Beaufort; Wardle; Driscoll). In other words, we believe that emotions have had a role in earlier studies, perhaps in ways invisible or unacknowledged. Second, the fact that we needed to draw on so many transfer-related concepts to help analyze our data and to help explain our findings demonstrates that emotions are a critical piece of the transfer puzzle that neatly fits into other established pieces (dispositions, metacognition, writing knowledge). As writing transfer scholarship continues to expand and deepen, we strongly encourage researchers to continue to explore the relationship between students’ past lived experiences, emotions, dispositions, identities, and the content of our classrooms.

Our findings suggest many avenues for future research, and we encourage researchers to continue to explore. Some questions we are left with include the following: What kind of classroom situations and instructor responses facilitate disruptive or generative emotions? How do students with different emotional dispositions respond to faculty feedback? How do students develop emotional dispositions in the first place? Are emotional dispositions context specific, or do they move between different learning contexts? Ultimately, we need more studies exploring the long-term impact of generative and disruptive emotions on transfer and writing development.

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Appendix

Emotions and Transfer Coding Glossary (.pdf)

Notes

1. Affect is a term typically used; however, since the special issue is titled Emotion in Composition, we have chosen to use the term emotion throughout this piece. (Return to text.)

2. These data come from an ongoing, larger, longitudinal study of writing transfer and learning development, which currently concluded its sixth year of data collection. (Return to text.)

3. Our inter-coder reliability was as follows: prior to the start of coding, we correctly identified places where emotions impacted writing 100 percent of the time; we agreed 87 percent of the time on the codes to be applied. We conducted a second inter-coder reliability test halfway through the process; we agreed 100 percent on both identification and coding. (Return to text.)

4. Limitations to this study included the small data set derived from one institution, which allowed us to go in depth but not understand broader patterns. A second limitation was in the infrequent nature of interviews—we do not have a complete picture of all writing that students did since the emphasis of this study was on long-term development. Finally, we had a minimum of two writing samples per year—for some students, this was all they wrote; for others, this was a small amount of their overall writing. Many chose to provide more than two writing samples each year. (Return to text.)

5. For the purposes of this particular analysis, whether an emotion is a state or trait is less important than what happens to the knowledge the student gains and transfers. Thus, we use the broad term “emotions” here to indicate either. (Return to text.)

6. This list was compiled as follows: if at least three students in our data set (23 percent) reported experiencing the emotion, and it was clearly disruptive or generative to their long-term writing in subsequent writing assignments and their self-reported transfer, and we saw evidence that that emotion impacted their writing itself, we included the emotion in this chart. Most emotions were experienced by well above the 23 percent of students. (Return to text.)
7. This finding raises a key question about emotions and transfer—specifically, what factors lead to students’ re-evaluation of negative experiences in the long-term? (Return to text.)

8. Please note that with this small of a sample, it is difficult to show quantitative coding patterns for each of the student groups. We’ve instead elected to show overall emotional experiences for students in the study (Q1 and Q2) but have drawn our examples from one of the four student cases above. This finding is an excellent jumping off point for larger-scale work gauging the range and spread of these emotional states. (Return to text.)

9. We will note that while this study focuses on writing, emotional dispositions in our study are by no means limited to writing; in fact, these categories seemed to be how some students experienced their academic lives more broadly. (Return to text.)

10. We will note that in her sixth-year interview (not included in this study, conducted during the drafting of this article), Alice did display both monitoring and control regarding seeking help and had more emotional regulation. (Return to text.)

Works Cited


---. “‘Mutt Genres’ and the Goal of FYC: Can We Help Students Write the Genres of the University?” College Composition and Communication 60.4 (2009): 765-789. Print.


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