

**Interdisciplinary Studies Project  
Project Zero, Harvard Graduate School of Education**

**From a Community of People to a Community of Disciplines:  
The Art of Integrative Humanities at St. Paul's School**

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## **Abstract**

In this paper, I consider the crucial elements of a successful interdisciplinary classroom in the humanities at St. Paul's School in Concord, New Hampshire, and explore the conditions that allow for its existence. Two factors converged to create and sustain an interdisciplinary program: teacher commitment and the administrative support of the school. The core characteristics of St. Paul's integrative classroom are: (1) a focus of the curriculum on a few essential topics (e.g. selfhood, social responsibility) which are approached from the perspectives of art, philosophy, literature and history; (2) a single (rather than team) teaching model; (3) an extensive use of dialogue and discussion; and (4) teacher facilitation of connection-making.

Teachers' integrative efforts are supported by the institutional culture — namely the closely-knit residential nature of the school, its independent status which grants it some immunity from standardized discipline-bound testing, and the direct administrative mandate to engage in interdepartmental exchange, for which additional time and resources are allocated. Teachers also add their personal intellectual breadth and their professional commitment to collaborative work, which results in an interdisciplinary program of high quality and integrity. The St. Paul's humanities program could serve as a model of an interdisciplinary curriculum in the humanities, and its institutional framework could be instructive for other school contexts.

### **Acknowledgments**

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This paper builds on the stories and testimonies of 14 people we interviewed at St. Paul’s School. As their voices are prominent sources of data, I am providing the list of their names and positions in the school to help the reader keep track of the “cast.”

***DRAMATIS PERSONAE***

- |                     |  |
|---------------------|--|
| Alston, May         | – 3 <sup>rd</sup> form (9 <sup>th</sup> grade) student in the humanities   |
| Anderson, Craig B.  | – Rector   |
| Callahan, Colin     | – Fine arts and humanities teacher, committed to integrating the visual arts into the humanities   |
| Camarda, Drew       | – 3 <sup>rd</sup> form (9 <sup>th</sup> grade) student in the humanities   |
| Carter, Christine   | – Humanities teacher, trained in history, convinced that the best history teaching is interdisciplinary  |
| Chase, George       | – Humanities teacher, with a passion for film, Japanese culture, and architecture  |
| Czarnecki, Sonja    | – Humanities teacher, a new member of the faculty, devoted to history and the use of technology in teaching history and teaching in general  |
| Dale, Candice       | – Academic dean, humanities teacher, member of the original humanities design team, passionate about poetry, creative writing, and interdisciplinary learning  |
| Hanas, Michael      | – Former humanities teacher, member of the original humanities design team, trained as a classics teacher, interested in connecting to other parts of the liberal arts curriculum with the goal of “cultivating students’ humanity,” currently an Upper School Head at Carolina Friends School in Durham, NC |
| MacNeil, Kevin      | – Former humanities teacher, member of the original humanities design team, a true “polymath” — has solid training in several areas (math, philosophy, art, and music) and is interested in integrating them in his teaching, currently Director of Studies at The Culver Academies in Culver, IN.           |
| Pook, David         | – A new member of the humanities faculty, philosophy Ph.D., has a passion for integrating knowledge, prides himself on having students talk competently in his class about Kierkegaard and Nietzsche in relation to art, literature, and history   |
| Rettew, Robert      | – Director of Ohrstrom Library, a committed proponent of the interdisciplinary humanities program  |
| Rodrigue, Catherine | – Head of the Humanities Division with background in both English and history teaching, an inspired leader of interdisciplinary education at St. Paul’s  |
| Shafer, Jackson     | – 6 <sup>th</sup> form (12 <sup>th</sup> grade) student in the humanities  |
| Wardrop, Terence    | – Computer science teacher, principal designer of technology applications for interdisciplinary humanities, staunch believer   |

in the value of curriculum integration in the sciences and other subject areas

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## Introduction

“It’s a magnificent spring day. The sky is clear blue, the air crisp, and the sun golden in the sky. The landscape is lush green, and the azaleas are exploding with blossoms of magenta, lavender, and deep orange. In short, it’s the perfect day to visit St. Paul’s School.” Thus opens a chapter on St. Paul’s School in Sara Lawrence-Lightfoot’s *The Good High School* (1983). Some 20 years later, my colleague and I made a spring trip to St. Paul’s School from the same place, Harvard University. This time, the goal was to explore the “goodness” of a particular program in St. Paul’s curriculum: interdisciplinary humanities. On campus, we were greeted in much the same way as Lawrence-Lightfoot had been years before — by the explosion of spring colors, a climbing ovation of wisteria, a purple blush of lilacs, and misty rooftops of school buildings nodding greetings through the water.

St. Paul’s is a special place. Its natural beauty is matched by a unique intellectual atmosphere that is carefully cultivated by teachers — the gardeners of thought and learning. A closely-knit residential community supports the sharing of interests and disciplines that my colleague and I sought to explore. The residential nature of the community seems to enhance possibilities for students and teachers — to reach out and connect. Connection is the hope of the current rector of the school, Craig Anderson. In his address to the school in May 2000, he asked:

What kind of place is St. Paul’s School? A distinct space of some 2,000 acres in the woods of New Hampshire with 100 buildings of varied architectural style and a community of more than 700 students, faculty, and staff even more varied. ... One member of our Master Planning Committee, a landscape architect, said that the landscape of St. Paul’s makes it a self-referential place, given the fact that it’s in the valley and its views tend to look inward as opposed to schools that are built on a hillside with expansive views. As such, St. Paul’s is a place that promotes thought, reflection, an appreciation of nature, and a sense of security. Given this sense of place, of sanctioned retreat in a bucolic setting, there is a danger that it can become too self-referential and hence isolated, insular, concerned only with its internal life, and oblivious to the community and other places that surround it. Our motto and mission as a school, however, is to serve as a corrective to any notion of elitist isolationism.

St. Paul’s interdisciplinary humanities program has been fashioned to carry forth this mission, to reach out and connect in an academically explicit way. Some of the puzzles it set out to solve were how to design a joint curriculum, how to create an environment for different faculties to work together, and what an interaction of disciplines and ideas might look like in the classroom. In our research on interdisciplinary institutions and educational programs at Harvard Project Zero, we were puzzling over similar questions. The St. Paul’s humanities curriculum captured our attention because of its claims to make “collaboration and discussion central to the humanistic classroom” and to provide opportunities for students to “play with ideas and create meaning out of a variety of

visual, aural and written texts” (St. Paul’s School Academic Program, 2001-2002). So, here we were on a perfect spring day, ready to learn more about it.

### Research questions and conceptual background

At the core of our research were the following questions: How is the curriculum integrated in the humanities program? What is the pedagogy that stimulates the making of connections among history, English, visual arts, and social sciences? How has the program come about, and what has sustained it organizationally over the years?

Our conceptual premise is that interdisciplinary learning, at its best, represents a higher level of disciplinary mastery when a deep understanding of core questions, basic tools, and methods of two or more disciplines facilitates and promotes integrative synthesis. Howard Gardner, co-Principal Investigator of our research, puts a premium on disciplinary understanding in *The Disciplined Mind* and cautions that genuine interdisciplinary work cannot commence before students have achieved “some mastery in at least two disciplines” (1999). A careful consideration of disciplinary epistemologies and ways to build bridges among them results in a better understanding of the disciplines and a sense of personal relevance of information in learners, as connections between disciplinary sources tend to be anchored in their core philosophical beliefs. Thus, disciplinary and interdisciplinary learning are intertwining rather than parallel processes — supporting and facilitating each other in the course of learning.

Thus, I define interdisciplinary learning as a dynamic synergy of different disciplinary perspectives. This assumes that the relationship of disciplines is not primarily that of a hierarchical or vertical interaction where one discipline serves to explain, illustrate, or otherwise mediate the other. Nor is it a multidisciplinary combination, which brings together different disciplines under one umbrella topic without the deeper exploration of the methodological or epistemological contributions of each. What I look for is a dialogical interactivity among different modes of thought, where each perspective is substantively informed by the other.

In their paper, *On Disciplinary Lenses and Interdisciplinary Work*, Boix-Mansilla, Miller, and Gardner define interdisciplinary education as one that is “geared toward deep forms of understanding that can make use of both [disciplinary and interdisciplinary] perspectives” (2000). Thus, interdisciplinary learning occurs when students “integrate knowledge and modes of thinking from two or more disciplines to create products, solve problems, and offer explanations of the world around them” (Boix-Mansilla, et al., 2000). Disciplines are not juxtaposed as in a multidisciplinary format but are “brought together synergistically to illuminate issues that cannot be adequately tested through one discipline” (ibid.).

Since this synergistic relationship among disciplines and ideas is central to our definition of interdisciplinary learning, I also acknowledge my debt to Mikhail Bakhtin. In his book *The Dialogic Imagination*, Bakhtin points out that a synergistic or “dialogic” nature is

inherent in any utterance (1981). In other words, every sentence that one says (he uses literary text as the basis of his analysis) orients itself dialogically toward other sentences and ideas that surround it. Dialogue, in his view, is not just something that characterizes vocal exchanges among people; it is also an internal quality of our thinking. Dialogue makes us always aware of the multitude of ideas with which our own voice relates and connects. In interdisciplinary programs, this “dialogic” quality of our thinking (using Bakhtin’s term) is emphasized and given high priority. For example, dialogue in St. Paul’s humanities classrooms transcends external interactivity among students and faculty and fosters internal complexity of their thinking about central issues of humanity. In our interviews at St. Paul’s, I looked for the same kind of “plurality of independent and unmerged voices and consciousnesses, a genuine polyphony of fully valid voices” that Bakhtin describes in his work. Therefore, the overlapping network of ideas about the nature of interdisciplinary learning and the “dialogic” quality of our thinking provides a conceptual framework for this study.

### Data collection and paper organization

St. Paul’s was the first school that our team studied as part of our investigation of pre-collegiate interdisciplinary programs. Based on background research and preliminary conversations with key administrators, the St. Paul’s humanities program met our basic selection criteria. These included:

- Existence of the program for at least five years
- Clear mandate or solid commitment to doing interdisciplinary work, stated in the mission or articulated by key personnel
- Continuity in direction and execution of the program
- Explicit pedagogy and assessment criteria designed to support interdisciplinary learning
- Appreciation of the complexity of the task, continued critical questioning and development of the program

The head of the Humanities Division, Catherine Rodrigue, helped select participants among faculty, students, and administrators based upon the criteria listed below. She also suggested venues for our classroom observations. Our sources of data included: six classroom observations, 14 interviews with teachers and administrators (12 in-person, two by phone), and three interviews with students. Most data collection took place during a three-day visit to St. Paul’s School in May 2001. Interviews with faculty members lasted approximately two hours. They included open-ended questions addressing the following themes:

- Participant’s educational background and preparation for interdisciplinary work at the school
- Involvement in the interdisciplinary program design and understanding of its mission

- Description of interdisciplinary pedagogy, illustrating ways of facilitating connections among disciplines in the classroom
- Assessment strategies and thoughts about optimal ways to evaluate students' performance in interdisciplinary assignments
- Description of impact of the integrative curriculum on learners

Interviews with students were typically one hour long and dealt with their understanding of the interdisciplinary nature of the humanities curriculum, description of an exemplary integrative assignment or project, and reflection on the value of interdisciplinary learning.

In what follows, I summarize our findings. The paper has two main sections. The first section explores key elements of the organization of an interdisciplinary classroom in the humanities. The second section considers key conditions that sustain interdisciplinary teaching. The conclusion characterizes the nature of St. Paul's interdisciplinary experiment in the teaching of humanities and explores the effect that interdisciplinary learning might have on the learner's social, cognitive, and personal development.

### **Key elements of the interdisciplinary humanities classroom**

#### *Vignette: Humanities class taught by David Pook*

*The class was under way when I arrived. The instructor, David Pook - or Pook, his preferred name - was pacing energetically among students and his teacher station — probing, provoking, and prying. “Is this how Nietzsche would describe the world?” he asks, pointing to a classical painting of a beautiful nude on the screen. “How would Marx relate to it?” Then, turning to “The Garden Party,” a story by Katherine Mansfield, he tries to help students locate this narrative in the history of thought and art. “How does Laura appear to you?” “Shallow, materialistic,” ventures one student. “How so? In the Marxist sense? How does the author strike this tone?” Pook summons students' literary analysis skills. Every time he asks a question, he seems to take students to a new domain of analysis, never letting them feel completely secure or finished in any one. I notice that despite his intensity, he easily leaves the battlefield to the students, once their passions around the topic are sufficiently ignited. Along the way, he keeps tossing more chips to keep the fire of the discussion going.*

*“What kind of narrator is it — reliable, omniscient, or unreliable?” he asks, getting at the literary theory which was discussed in previous classes. He makes sure that students are fluid in this terminology. Then he plunges them into the philosophical realm: “Is this Marxist language? Take five minutes to think what Marx would say and at what point.” Pook turns the discussion on its axis. The conversation at this point is getting more animated. The eyes of the students are back on the screen. “What kind of a garden party is Manet drawing here? Is it the surface of life?” he questions. In other words, students are asked to translate their philosophical and literary understanding into a visual representation. “What kind of aesthetic is it? What kind of authenticity? In the*

*Kierkegaard sense? How does it function?” Pook presses on. Another painting follows. This time it is a Courbet. Pook keeps the students on the same question. “And what kind of party is this?” Many pairs of eyes are now trying to read a Courbet on multiple levels — Mansfield, Kierkegaard, Marx, and the history of Western Europe at the end of the 19<sup>th</sup> century. At the same time, they have to construct a bridge to Manet.*

*Then follows an ultimate provocation from Pook: “What kind of party is St. Paul’s?” Students seem disturbed, polarized, and energized by the question. It was neither abstract language analysis nor a foreign art history class any more — the table is turned on them! Philosophers from the past and painters from distant places were stacked up to ask that piercing question of who they were as students at St. Paul’s School. What kind of life did they choose by the act of coming to this exclusive New England school? Suddenly, they were naked in front of themselves. “Why do I have to choose?” asks one student in anxious defiance. The choice between Manet and Courbet, Marx and Kierkegaard becomes a life choice for him. Pook presses even harder: “Is this life here about the void of the upper middle class as Marx described? Is it an illusion like the kind that Laura and her mother [characters in Mansfield’s story] are indulging in? Or is it real? What kind of life do you choose — the life of the surface? The life of ignorance and oblivion? Or is there something else to it?” The class ends there, but as students are rising to leave, they are by no means finished with the discussion, even if too shaken and vulnerable to sustain it.*

This vignette gives a snapshot of the connection-making that goes on in the interdisciplinary humanities classrooms at St. Paul’s School. Described below are the key aspects of such a classroom.

### Focusing the curriculum on a few central questions

Pook’s treating students to a variety of “garden parties” — a painting by Edouard Manet, a story by Katherine Mansfield, theories by Karl Marx and Søren Kierkegaard — keeps them on two central issues: selfhood and social responsibility. Do you choose to be socially engaged or float through life of non-commitment and pleasure that knows no other meaning? Different disciplines and art forms are lined up to answer that question.

Fine arts and humanities teacher, Colin Callahan explains, “at the core of the program is the underlying association of everything.” Helping students to uncover synergistic relationships among topics is an important goal of the faculty members. Emphasis on synergy and synthesis rather than abstraction and analysis seems natural for the curriculum, the goal of which is to cultivate humanity and give answers to many fundamental “whys.” In his work, *Norms and nobility: A treatise on education*, former St. Paul’s rector, David Hicks, captures the essence of the humanities curriculum by making the distinction between asking why and asking how:

What is the meaning and purpose of man’s existence? What are man’s absolute rights and duties? ... What is good, and what is evil? Why are we

here? [Rather than] how does it function? What parts does it consist of?  
(1981)

Hicks continues:

The beauty of a classical curriculum is that it dwells on one problem, one author, or one epoch long enough to allow even the youngest student a chance to exercise his mind in a scholarly way, to make connections, and to trace developments, lines of reasoning, patterns of action, recurring symbolisms, plots, and motifs.

Inspired by Hicks and his classical ideal, the humanities program takes issue with running through dates and events in quick succession. Instead, it insists on covering less but staying longer with significant topics. Former humanities teacher Kevin MacNeil notes:

If you're covering World War I in a couple of weeks, you can't hope but do it superficial justice if you want to cover the entire sweep. So you might want to focus on a single battle that you think is representative of the circumstances of the war and talk about it. The hope is to have learning from central concepts take place at a deep enough level to become lifelong learning.

Emphasis on depth instead of breadth may seem paradoxical for an interdisciplinary program, which by definition is geared toward embracing a wide range of knowledge bases. Broad programs often risk dilution and superficiality of disciplinary exploration. The interdisciplinary curriculum at St. Paul's, however, seems to create depth out of breadth itself. Fewer topics are taken up, but they are looked at intensively from many vantage points, resulting in a more complex knowledge of the subject. Few teachers or students in the program express concern about the compromised breadth of learning in English, history, or the visual arts. Although in-depth mastery of domains is not the goal of most high school learning, the level at which it is tackled in the St. Paul's humanities program provides sufficient foundation for generating meaningful disciplinary understanding.

The use of high quality primary texts in the humanities goes hand in hand with an emphasis on in-depth learning. A 9<sup>th</sup> grade student, May Alston, reports, "We have to cite all primary sources. In the last two/three papers we've done, we haven't been able to use any secondary sources at all." Learning firsthand from primary sources pushes students to take the role of interpreters of texts and critical examiners of the core questions of their own humanity.

Frequent writing is another integral component of the interdisciplinary classroom that supports deep study of central topics. A memo sent by Catherine Rodrigue and members of the Humanities Curriculum Design Team to David Hicks points to the emphasis on writing "as an extension of the thinking process, with special attention to pre-writing, rough drafts, revision" (1994). To Terry Wardrop, who watched the development of the

program as a computer science teacher, the change in the quantity and quality of writing is very tangible. “The folder that was there for the ninth grade humanities kids’ disk space increased dramatically compared to the disk space requirements of the older grades [who were not in the humanities program].” “In later years,” he continued, “as the humanities program began to move through the grades, the storage requirements for this central server just would double every year.”

Because of the low coverage of facts and events, chronological gaps in the curriculum remain a concern for some teachers, parents, and students at St. Paul’s School. Academic dean and humanities teacher, Candice Dale, chronicles typical parents’ questions: “How is my child ever going to learn history? Are they not going to know anything about WWII?” Upon arriving at St. Paul’s, 9<sup>th</sup> grade student, Drew Camarda, was himself concerned whether the integrative humanities would do justice to his passion for history. Although his concern was largely put to rest in the first class, the humanities faculty recognize the issue and now offer individualized tutoring for test-minded students to help them bridge some of the chronological or factual gaps.

Focusing the curriculum on a few central questions of humanistic importance and deeply exploring them through multiple lenses is an organizing force of integration. However, there is a caveat. The naturalness and “ease” of connection of disciplines in the humanities may lead to a partial neglect of the rigorous exploration of differences among disciplinary modes of inquiry. This neglect could be benign if disciplinary learning is pursued in earnest at the same time. To be truly integrative in this centripetal or theme-based model, the program needs to insist that its synthesis be preceded by serious study of the primary disciplines and rely on deep knowledge of texts, art, and history.

St. Paul’s humanities does just that. It does not fall into the trap of superficial and facile connection-making that is not grounded in rich data. Connection-making in Pook’s *Garden Party* class, for example, assumes that students understand impressionistic sensibility and Marxist philosophy before they can see one through the lens of the other. The bar for knowledge of primary materials and theories is set high. Students have to justify their connections by drawing on specific knowledge from more than one subject area. Therefore, a centripetal or theme-based curriculum in the St. Paul’s humanities does not lose track of its disciplinary roots nor does it keep the conversation at a level of philosophical abstraction that dissolves disciplinary facts. Instead, it maintains a delicate balance between disciplinary separation and philosophical stretching of the fundamental questions, which results in a rigorous interdisciplinary curriculum.

### Single teacher in the classroom

Another important element of the organization of the interdisciplinary humanities classroom is that it is taught by a single teacher. One teacher brings a range of ideas from different domains and attempts a synthesis in front of the students. A single teacher format reinforces the centripetal structure of the curriculum and the integrative nature of learning.

The decision to teach solo was deliberate on the part of the first designers of the program and prompted by noted educator Theodore Sizer who advised the program in its early years. Former humanities teacher, Michael Hanas remembers:

[Sizer] was among the first to suggest to us that if we really believed that what we were asking our students to do was appropriate, then we had to model it ourselves. We had to be willing to be more than the English teacher or the art history teacher. We had to model the student role.

Rector Hicks supported this idea and rejected team-teaching as a model for the new humanities. Candice Dale recalls:

[Hicks] really wanted the teacher to become the learner in the same way we were expecting our students to explore the learning. So once we all got over that notion that we won't be paired in the classroom with different disciplines, we began to realize we needed to work really closely together in developing a program.

Teaching solo at St. Paul's does not mean teaching in isolation. "There is a necessary collaboration among members of the teaching team at each form level," library director Bob Rettew comments. "There is more mutual accountability; there is more shared grading; there is more norming of perception; there is much more communication among faculty within humanities than ever before." Still, teaching multiple disciplines solo was not an easy sell to the faculty at first. Coming out of the shelter of disciplinary expertise and assuming the attitude of the learner caused pain and tension in teachers. Candice Dale remembers:

There is no question that when I had a Shakespeare poem, I felt more comfortable than I did when I was talking about the Reformation — but I also found it pretty exciting to be learning at the same time! I began to realize that I was being energized by the learning at the same time as the students were.

St. Paul's interdisciplinary humanities program insists to this day that teacher collaboration should happen behind the scenes. Team teaching is not rejected altogether; what is rejected is the division of labor approach to teaching, where a teacher delegates expertise in an unknown area to another teacher rather than wrestling with it in front of students. Computer science teacher Terry Wardrop had a glimpse of true collaboration in team-teaching the *Global Science* class:

The biology teacher would tell the physics teacher something, and the physics teacher would go, "Wow! I had no idea!" and they would start arguing about something. So the kids would watch these two teachers argue about what was true.

Teachers in this model were novice inquirers as well as public thinkers. Former humanities teacher Kevin MacNeil describes this as “a different and much more rigorous understanding of ‘team-teaching’ than is traditionally thought.” But it may be also harder to do, he admits, because the temptation might be too great to slip into the expert mode and not leave the disciplinary shelter.

In effect, St. Paul’s single teacher approach supports the integrative charge of the program. It places a premium not only on the product of integration but also on the process (i.e., the integrative thinking and learning that the teacher models for students). The teacher is engaged in fostering her own integrative understanding with colleagues and draws students into that circle. As much as this process is risky and labor-intensive, it creates synergistic forces in the classroom that are ultimately as rewarding as the discovery itself.

### Centrality of dialogue and discussion

A striking feature of an interdisciplinary classroom is its discussion orientation. “Interdisciplinarity is loud!” commented Stephanie Marshall, president of the Illinois Math and Science Academy, another school participating in our study. St. Paul’s humanities classrooms are shouting proof of that. Student Jackson Shafer vividly remembers one debate where 13 students, who did not know each other before, started “jumping out of their seats talking.” Full participation of everyone is stimulated by teachers’ efforts to push students to see the other side of issues that have direct relevance to their lives.

Pook does it masterfully in his *Garden Party* class. Weighing different ideas and relating them to student’s sense of self is likely to cause much more internal “dialogue” and reassessment of personal values than simply reading Katherine Mansfield’s story or looking at a Courbet painting. Student May Alston found that her fellow classmates become “more receptive to expressing opinions and listening to opinions rather than asking for factual or analytical information.” She continues, “I used to be a very analytical person — I still am — but I am less so because of the ability that this class gives me to express opinions and to develop opinions.”

Charged with the task of helping students understand what it means to be human, the humanities curriculum at St. Paul’s brings together not only disciplines but also people. Shafer comments on his experience; “It’s more personal contact, more voice contact. I think we feel more comfortable criticizing each other in the humanities class than we would in another class. ... After humanities, you know how people feel about certain things. You hear about their principles.” In the process of building understanding, students and teachers develop ways of accommodating differences of opinions, beliefs, and perspectives. Those are essential foundations for the integrative learning process. Discussion and dialogue are not confined to the classroom or to interaction among people. Interdisciplinary conversation is apt to provoke “dialogic imagination” in the

Bakhtinian sense (1981), which is likely to make their internal thinking more complex and multi-faceted.

Discussion and dialogue are part of any good classroom, but in interdisciplinary humanities at St. Paul's, they do not appear to be optional instructional choices. Dialogue and discussion are particularly compelling in the curriculum because it is centered on examining the self and its core values and issues. This allows the teacher to bring everyone to the table. Facts from history, sociology, or the visual arts become steeped in personal experience and meaning, thus becoming connected through them. Interdisciplinary understanding enmeshes discrete facts in human experience, and makes them personally meaningful. It also raises awareness of their incompleteness. Student and faculty participants report in their interviews that personalization of knowledge as a strategy of connection-making is conducive to both internal and external dialogue among and within learners.

Even the physical design of a humanities classroom reflects the centrality of dialogue. An oval Harkness table in the center is the hub of the discussion and brainstorming that involves a big chunk of class time. In a sense, discussion and dialogue is the integration process that helps students reach a point of synthesis.

### Connection-making

There are many ways in which connections among facts and disciplines are made in the St. Paul's humanities classroom. One way is for teachers to pose questions about the possible relatedness of texts or artifacts, then probe for justification and further elaboration of links between the two. Catherine Rodrigue shares the following:

I try to listen to what [students] say and highlight it when [an association] is done effectively, and then ask them to follow up on it. They might make an initial association, and I might ask them 'Okay, well how can you explain what that means? Can you demonstrate what that means?'

Sometimes, she explicitly sets up the association for students, like the connection between *Jaws* and *Beowulf*. Humanities teacher Christine Carter describes her work in class as a process of "constant weaving." She explains, "You are constantly referring to things from the past, things from the present — always looking for visual image." Shafer describes the effect of this weaving as "a holistic experience":

Reading that this happened then is one way of learning history ... .  
Through a novel, you get a much more all-encompassing idea of the time period. I think reading several novels in the time period, ... watching videos on it, seeing artwork from a time period — that in itself is the best way to learn history.

To facilitate connections, the humanities teachers embed facts in their cultural and historical contexts. Catherine Rodrigue “creates depth” in students’ understandings of *Huckleberry Finn*, for example, by embedding it in the historical events of the time. She asks:

Can you really understand this book without understanding the Declaration of Independence and The Constitution and The Civil War and the post-Civil War Reconstruction Period? Can you understand it without understanding the geography of the United States and what it means to be floating south on the Mississippi River?

Historical knowledge thus informs students’ literary understandings. Humanities’ teacher Sonja Czarnecki’s goal in class is “getting [students] to think of literature and history as dynamic struggle between dream and reality.” She explains: “To think philosophically and yet use specific stories to back up ideas [helps them] seek out connections in their world and read what we live in as a text.” Reading text as a product of history and contemporary life imbues learning with new meaning and personal significance.

When a distant historical moment and obscure painting come together to explain and even transform students’ own present-day beliefs, there is a sense of satisfying synergy. “What kind of party is St. Paul’s?” asks Pook of his class. “What form does the plague of 1348 take in 2001?”, asks Rodrigue at the close of her class on the Middle Ages, as she displays a photo of animal carcasses incinerated because of foot-and-mouth disease. The act of synthesis at this moment is no longer abstracted from the knower — it includes the knower. While personal ownership of knowledge is the goal of all learning, it plays a special role in this case because it provides a meaningful platform for rich disciplinary connections. The plague in Rodrigue’s class quickly moves from the realm of medicine to the realm of philosophical understanding of disease, political belief, and ethics. If the discussion of the plague was confined to the Middle Ages without the attempt to move it closer to students’ experience, it is doubtful that it could span those different areas of thought as easily.

The path of connection-making, no matter which strategy is used, is not easy and demands a significant sacrifice of certainty. Teachers need to be ready to take the discussion where it goes and risk fundamental change in their views and lesson plans. “Putting texts, ideas, and images together in new ways,” describes Czarnecki, “does force even kids who are not the most sophisticated abstract thinkers to come up with some interesting stuff — and it’s always surprising!” Frequent encounters with “unanswerable questions” and continual experimentation feels destabilizing at times even for experienced teachers like Dale and Rodrigue.

Belief in the underlying connection among areas of knowledge and the centripetal organization of the curriculum around core questions underlie teachers’ strategies for fostering connection-making in the classroom. Those strategies include posing questions that prompt students to discover connections on their own, asking them to justify predetermined connections or to contextualize a text or a work of art as a product of

culture and history. In teachers' views, the ultimate integration seems to be achieved when the confluence of ideas produces personalization of knowledge or a new understanding of the self.

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In summary, interdisciplinary classrooms in St. Paul's humanities program combine several key elements. Discussions focus on a few central questions, which are explored in depth using multiple disciplines and media. A single teacher facilitates these discussions and models how to venture into new areas of knowledge in search of answers. Dialogue, debate, and application of different perspectives are the vehicles for connection-making in this classroom. Dialogue in such an environment makes students' thinking more multi-faceted and personally referenced. What enhances the likelihood that interdisciplinary humanities classroom experiences are successful is teachers' and students' dispositions to pursue connections actively and to ground them in disciplinary facts and theories. None of the key elements of interdisciplinary pedagogy are easy to implement. Centering the curriculum on important issues of human existence and building connections in the face of uncertainty is an unpredictable, risky task. To sustain this way of teaching, the program relies heavily on the institutional support as well as the grassroots commitment and intense collaboration on the part of teachers. The combination of these factors is what makes a class like Pook's *Garden Party* a reality.

## **Key conditions for interdisciplinary teaching**

### Institutional support and school culture

Describing in detail the elements that shape St. Paul's interdisciplinary humanities classroom serves two purposes. First, it helps to reveal the uniqueness of the program and its pedagogy. Second, it sheds light on the underlying elements of the program, freeing the reader to seek other ways to apply the St. Paul's model. Schools that might be motivated by different goals or have different kinds of resources to draw upon might find their own solutions for addressing issues such as the labor- or relationship-intensiveness inherent in any interdisciplinary format. Those schools might find other ways to extend learning and conversations beyond their classroom and to deal with the non-residential nature of their campuses. My main goal here is not to lock the reader into one vision of the interdisciplinary humanities, successful as it might be. Rather, through a detailed description of what works in the culture and design of the St. Paul's humanities program, I seek to point administrators and designers of future programs in the direction of strategies and formats that might suit their own contexts.

When asked to describe what goes into the making of an interdisciplinary learning community, former teacher Michael Hanas said, "It has something to do with the desire to make connections. ... An openness and an appetite for making connections, for not defining things as narrowly as possible, but as broadly as possible." St. Paul's School

displayed its “appetite” both in its organizational culture of open intellectual exchange and in the administrative initiatives that brought interdisciplinary humanities into existence.

### Closely-knit residential community

Before any organizational steps were taken to initiate a new program, St. Paul’s School already had fertile ground for sowing the seeds of interdisciplinary dialogue. The St. Paul’s campus is a small residential community of about 700 students and faculty members, known for its intellectual intensity and excellent liberal arts curriculum. The closely-knit residential character of the school offers ample opportunity for interactivity and exchange among people on campus. Faculty members are required to perform dorm duty, have meals with students, coach sports teams, attend chapel services, and participate in arts activities. Bob Rettew describes the responsibilities: “One might be a math teacher but also an advisor in a girl’s dorm, a junior varsity basketball coach, and an advisor to a literary society. We play a number of different roles which multiplies and enriches the opportunity to work with students in different settings.”

When the new humanities program was introduced in 1992, one of the ideas behind it was specifically to bring continuity between the academic and residential lives of students by supplying common topics of discussion and debate. The current rector, Craig Anderson, continues to see “residential life curriculum as a place, a context, for such integration.” He specifically notes, “I envision a residential life program that will provide an opportunity for reflection by correlating what transpires in the classroom, on the playing fields, in chapel, and in houses, with community and world events” (2000).

### Proven record of academic excellence

The established reputation and independent status of the school provide freedom to experiment while at the same time removing the immediate pressure of standardized assessment. Michael Hanas points out that the school’s original “commitment to teaching in a way that was not geared toward test preparation as a central criteria for success” helps interdisciplinary humanities. “We’ve been pretty fortunate here,” adds Candice Dale, “that there hasn’t been that pressure to teach to the test. What we are doing in the classroom is the most important of what we are doing in terms of helping students think critically. Writing well, asking good questions, and reading closely is as important as any test.”

While capitalizing on the school’s reputation, the designers of the program were strategic about keeping the school’s traditional values of liberal arts education intact. “If you are going to make something this radical,” Catherine Rodrigue learned from experience, “you have to make it conservative radical. So if you have the Greeks and the Romans and the Middle Ages, it has a kind of conservative element that parents can understand and accept.” This strategy, according to Hanas, paid off in the end “as parents saw the amount

of writing the kids were doing.” Keeping those conservative educational goals on top, the interdisciplinary program ensured support of the trustees, parents, and other constituencies. “As the old-fashioned goals of teaching reading and writing were very central [to interdisciplinary humanities]... parents responded very favorably,” Hanas explains.

With its commitment to the traditional values of liberal arts education, the interdisciplinary program is not immune to the pressures of a high-stakes testing culture. The school’s reputation of excellence is a double-edged sword — granting some freedoms but also imposing relentless demands. Hanas comments, “You don’t want to do anything to jeopardize your record because even at a school like St. Paul’s, there’s a certain fragility about success in the really high-stakes college admissions game.” Currently, St. Paul’s generally passes this test, as school graduates are “still getting into great schools, and [interdisciplinary humanities] hasn’t impacted that.” However, the AP History test remains a challenge for students because the humanities program takes a decidedly non-chronological tack, thus leaving a lot of gaps for students to fill. “Do you mean my son will graduate from school and won’t know what happened in 1693?”, one concerned parent asked. Parent demands of this kind are a reminder that the interdisciplinary experiment at St. Paul’s is held to higher standards on all accounts and needs to have strategies in place to meet them.

#### Administrative mandate for the interdisciplinary humanities program

The humanities program would probably not exist if it were not for the initiative taken by David Hicks, former rector of St. Paul’s. Hicks came to the school with a full-fledged philosophy of liberal arts education and a vision of how it could be implemented. He laid out his vision in his book, *Norms and nobility: A treatise on education*. Central to his view is a critique of modern education as compromising the classical ideal and supplanting “the normative with the operational.” The “supreme task of education,” in Hicks’ view, lies in “the cultivation of the human spirit: to teach the young to know what is good, to serve it above self, ... and to recognize that in knowledge lies this responsibility.” Relying on Aristotle, Plato, and Socrates, Hicks asks, “What is the value of our knowledge if it is not in some way connected to the Ideal? Is not scientific knowledge ultimately dehumanizing, pointless, and destructive — inhibiting our sense of responsibility, while heightening our powers — if not balanced against a knowledge of what is good and ideal of how man ought to live?” (1981)

Hicks’ quest for interdisciplinary education is motivated by the urge to bring core questions of human existence into the classroom. “When we fail to make the connection between our disciplinary parts and the whole knowledge, education becomes valueless: bled of meaning for the individual. The hand cannot be studied apart from the body. The accumulation of discrete parts of knowledge does not add up to wisdom,” he explains (1981). However, connecting parts to the whole does not mean slighting the study of disciplines. Teachers, he believes, should be asked, “Are your students taught to distinguish among the various species of knowledge and to appreciate the uses and

limitations of each? Are your students alive to their need for poetic truth as well as scientific truth, religious truth, and historical truth?"

After the interdisciplinary humanities program received an administrative mandate to exist, a committee was formed with the task of a practical re-thinking of the humanities curriculum. The task involved a difficult process that took its toll on the school community. Hanas, who has been a supporter of the program from the start, describes the daunting challenge of transforming humanities teaching:

We were trying to read material we had not read before. We were trying to develop a language necessary for us to engage with our students over topics with which we had just become familiar. There was the need for us to be able to sit around the table, consider a particular adjustment or a particular ingredient in a course and to stare at one another in disbelief, or to stare at the person who had suggested it in disbelief, before being able to begin to ask the questions . . . . This was the most labor-intensive professional experience of which I've been part.

Students shared the challenge of new interdisciplinary learning. They were unhappy with the amount of reading and writing the new program required and protested vigorously at first. T-shirts and posters of these early days, Dale showed us, read, "End insanity, end humanities!" It featured Rodrigue with a knife in her hand and other teachers in equally menacing postures.

Teachers who were hit the hardest were the older faculty members. The anxiety among them was primarily caused by a sense of loss of expertise. "How can I possibly teach history? I don't remember the last history course I took! I don't know how to teach a poem . . . . How can I do that?" recalls Candice Dale. A period of exhausting and exhilarating experiments began. Some teachers, according to Kevin MacNeil, "were won over as they participated in the teaching teams and saw the success of the curriculum. In other cases, people simply were not prepared to work in that kind of environment." So, people for whom the stretch was just too much or the move was too fast left, while others stayed to teach both the interdisciplinary and discipline-based elective courses.

The decision to keep a level of traditional disciplinary teaching in the interdisciplinary curriculum was an important compromise. For example, according to Dale, keeping sixth form (12<sup>th</sup> grade) humanities almost exclusively discipline-based was an opportunity for the oldest students to "[take] courses in depth in the traditional English, history, religion, and art." It also helped retain good teachers who had reservations about the interdisciplinary teaching. Some faculty members view this as a temporary solution, however, and continue to aspire to what Bob Rettew described as "more linkages across the divisions than we have, between the humanities division, the languages and the arts division, and the science and the math divisions." Unification of the curriculum across the wide divide between the sciences and the humanities has been one of the goals of Rector Hicks' reforms. However, integration of the sciences, the social sciences and the humanities disciplines remains a distant reality at St. Paul's, where most teaching outside of the humanities continues to be discipline-based.

Many teachers in the humanities view the coexistence of the disciplinary and interdisciplinary modes of teaching as a constructive feature of this curriculum rather than a compromise. They claim that there is continuity between the disciplinary and interdisciplinary approaches. MacNeil hopes that students will leave his interdisciplinary class wanting to dip deeper into disciplinary knowledge. “Reading Walt Whitman’s poem,” he explains, “deepens their understanding of the spring of 1865 through the lens of a very thoughtful, sympathetic observer of [Walt Whitman’s] times . So, is it enhancing the teaching of literature or is it enhancing the teaching of history? Probably both.”

To ease the difficulty of transition and to safeguard the humanities program against consequential mistakes, the original design team made a strategic decision: it would offer the program gradually, starting in the earliest grade first and adding the next grade a year later. “It was ... important to begin at the ninth grade level at a school like St. Paul’s, who could get maybe 60 percent of their graduating class in the ninth grade but doesn’t assemble a full graduating class until the tenth grade. There was, I think, more institutional support for innovation at that grade level because many people felt that if it wasn’t successful, they would still have time to recover before they got to be juniors and seniors,” MacNeil explained.

Hicks made the first crucial steps to create the new interdisciplinary humanities program. He outlined the basic vision, formulated a plan of action, took the brunt of the initial resistance, and made some necessary compromises. But he did not stop there. To secure the program’s future, he and the school needed to make other tangible commitments.

#### Resources to support the interdisciplinary program

Additional time and funding were needed to design and develop the new curriculum, as well as to maintain the increased level of interactivity among teachers. Likewise, more time was needed in the classroom in order to achieve the goals of the interdisciplinary curriculum. Faculty members had to keep “at least a step and a half ahead of students,” according to Dale, and that takes time, too. Hicks fought to provide the new program with the time, space, and funding that it needed. He paid the first design team to return to work a few weeks earlier in the summer to work intensely on drafting a humanities curriculum. He also realized that the humanities teachers needed time during the school week to maintain the level of dialogue that was needed. Therefore, he negotiated lower course loads for the humanities faculty. Time away from the classroom became time for intense learning from colleagues in order to coordinate teaching efforts, acquire new skills, and visit each other’s classrooms. Teachers need “a lot of colleague time, so that they can get together and help one another out,” says Wardrop. Rodrigue sees “a significant professional development opportunity” in the time that teachers spend in weekly meetings, classroom visits, and other collegial exchanges.

Time within the classroom needed to be re-thought too. New scheduling was “developed around the humanities program,” says Rodrigue, as the class became a research/writing lab as well as a debate club. Faculty members requested and were granted double-blocks (90 minute periods) to teach the new curriculum. “We felt that it wasn’t just English, and it wasn’t just history. By making it a double credit program came more time, more homework, and more reading,” says Rodrigue. Having enough class time remains a vital concern of the program to this day.

The time and relationship-intensive nature of the interdisciplinary program makes it an expensive proposition for the school. Continuing the administrative commitment is essential. A memo from Rodrigue, for example, calls for hiring additional teachers. This means “significant increases in money budgeted for salaries,” “additional housing,” “classroom space,” and “high-tech classrooms” (1999). In May of 2001, the Academic Schedule Study Committee recommended “longer blocks of class time,” more time for faculty members “in the academic schedule to hold meetings or find people,” as well as a less “crowded evening schedule” (2001).

Another important support for humanities teachers is technology. “Technology is vital because visually, it creates the kind of hypertext environment that an interdisciplinary program encourages,” Rodrigue explains. The visual medium proved to be an essential glue that held various pieces of the integrative curriculum together. Many teachers describe the visual arts as central to the interdisciplinary classroom because it makes a tangible reference point with multiple entries. It also provides cognitive support to students, who might otherwise be lost in the abstract or analytical discussion, especially in these visual image-driven times. As a result, an essential piece of equipment that is present in every humanities classroom is the Sony Visualizer, which allows teachers to project any printed text or image on the screen without having to make slides. Thus, pictures and artifacts become as central to the discussion as text, making the change of media seamless. In one form or another, technology has been an important part of this program’s design.

In summary, interdisciplinary programs like the one at St. Paul’s are hungry for resources and rely on strong institutional commitment. Such programs, according to Rettew, “are expensive. They require re-training of faculty members, exhumation of pedagogical assumptions, and exhumation of implicit philosophy of education. They are challenged by consumers — parents. They are difficult to design. Faculty need support, training, development, courage, and new ways of performing . . . .” Rodrigue adds, “The highly experimental curriculum needs more support from above and cannot function in a vacuum, run by master teachers.”

### Faculty commitment

Master teachers, however engaged in intense dialogue with each other, are an essential factor in a successful interdisciplinary curriculum. Partnership and dialogue among faculty members are supported by both internal (personal chemistry, intellectual breadth)

and external (ability to meet, tutor each other, visit classes) factors. Both play substantively into the success of interdisciplinary teaching.

*Weekly meetings, classroom visits, collaborative assessment sessions*

From the beginning, teams of teachers from each form level began to meet for a full period during the school week and review the themes that were discussed in classrooms throughout the week. The aim is to suggest new approaches to bridging gaps of knowledge. The meetings are also the time to laugh and offer social support and encouragement. Every teacher we interviewed underscored the crucial importance of these weekly meetings. They make interdisciplinary teaching possible. “I think weekly meetings are the most helpful thing we have as a group,” commented teacher George Chase, echoing the sentiments of many of his fellow teachers.

Weekly meetings, according to Hanas, are at once “a teaching session, a therapy session, support group session. . . . It functioned on a number of levels to support the teachers who were teaching in it.” Building these important sessions into the day and into class time, rather than meeting “at seven o’clock at night when no one wants to be there or seven in the morning” was also a “big” step in Dale’s view as a teacher and administrator.

Another way to sustain dialogue and continue learning from each other during the day was to have an open door policy for collegial classroom visits. “If, for example,” Dale describes, “Colin [Callahan] was going to do a demonstration on a particular painter, I could go in his class and watch him do that and then do it myself.” Lower teaching loads make such visits possible in terms of teacher schedules. As Hanas describes, “We became more accustomed to opening our classroom than any one of us had been before, and we reaped enormous benefits from watching one another in action.”

Along with curriculum development, another important process that often happens as a collective effort is joint assessment of student work. It typically takes place during teaching teams’ weekly meetings. Teachers develop assessment rubrics together and grade each others’ student papers in a joint session. An important criterion of excellence in students’ integrative writing for teachers is their ability to justify the connections. “I am looking for . . . the ability to point to the text, to root out the evidence, and to make those connections in ways that are valued and important,” says Callahan. Pook takes this further: “Are the kids able to talk about John Stuart Mill’s *Autobiography* and Dickens’ *Hard Times* at the same time and pull them together in really interesting and fascinating ways? And when they do, do they invoke Kant along with this painting in a way that helps illuminate what’s going on?”

The substantive and specific assessment measures of successful connection-making, however, remain an elusive topic for many teachers. Rodrigue admits that she feels “somewhat impoverished” in that regard. Learning in the interdisciplinary fashion defies current standardized or discipline-based assessment measures. How do you assess someone’s ability for creative synthesis of information? Current methods of evaluation are subjective, involving qualitative judgement of students’ creative writing. Teachers

look at the end product holistically, without trying to parse it into pieces: historical validity, logic, visual literacy, knowledge of economic theory, and so on. The idiosyncrasy of assessment in the humanities concerns Rodrigue, who would like to have a more deliberate strategy in place. Nevertheless, the joint grading process is beneficial in itself. It keeps the dialogue among teachers going and offers them opportunities to triangulate their personal judgments.

Increased interaction among teachers in the humanities depends on not only having time or space to meet but also on their trust in one other. Hanas describes relationships with his humanities colleagues as “a particular kind of closeness, a particular kind of trust, a particular kind of gratitude, a particular kind of love.” This closeness takes time and nurturing to develop, of which future interdisciplinary program designers need to be mindful. The original design team at St. Paul’s saw that having different teachers push their favorite texts compromised the desired coherence in the curriculum. According to Rodrigue, this realization started “to break down some of its defenses.” The “ugly period” in the history of the program lasted about a year, and eventually gave way to the ease with which members of the original team could now “yell at each other” and “not go into a sort of hiding from each other.” Hanas recalls, “It takes a lot of patience and a lot of forgiveness because ... we all have either our academic passions or a passionate belief about pedagogy or a passionate belief about assessment — all that has to come out onto the table and be argued out.”

The bonding and trust that emerged after a period of “defensive ugliness” paid off in a curriculum informed by the expert voices of many people. “I work with a team of teachers who constantly help me get better,” comments Callahan. “We are learning from each other constantly,” echoes Sonja Czarnecki. “I find that the intellectual atmosphere among my colleagues is so stimulating and exciting and genuinely creative.” Being part of the network of many minds, through regular meetings and class visits, allows teachers to better reach for integrative excellence.

#### *Personal qualities: intellectual breadth and learner attitude*

Besides establishing physical venues for collaboration, the personal intellectual dispositions of the teachers are an important factor that allows them to come together and teach in integrative classrooms. The original design team brought in qualities that made their transition to interdisciplinary teaching easy, if not inspired. Every member of the faculty with whom we spoke seemed to have a broad palette of disciplinary interests and an avid desire to learn. This breadth of intellectual commitments takes many shapes. Some actively pursued different concentrations in college, others elected “not to elect” a major, thus leaving the door open for changing disciplinary affiliations. Some teachers like Rodrigue or Dale were initially well-rooted in their disciplines; they then grew aware of their discipline’s limits and were looking for ways to transcend them. In any case, an intellectually voracious appetite seems to be the hallmark of a successful humanities teacher at St. Paul’s. Luckily, Hicks’ reforms coincided with the presence of several such teachers on campus.

MacNeil is one of these teachers. Rettew describes him as “a true polymath,” someone who freely travels across several domains both in his learning and teaching. His master’s degree “was in mathematics. His Ph.D. was in moral philosophy. His current interests are in European and American history. MacNeil is a gifted musician who is able to teach not only within the humanities curriculum but to bring to bear his knowledge of these other domains.” Kevin describes his multiple interests himself, “Temperamentally, I’m a person who looks for connections among things. I have taught at St. Paul’s in their summer program — a course in art, music, and mathematics — where we look at the connections and the role that form plays in those different disciplines. I’ve always been intrigued by the connections across disciplines. So I think my background ... was a manifestation of my own curiosity about connection-making.” This disposition for tracing connections made the interdisciplinary program for him a compelling one to be involved in.

Examples of the intellectual breadth and open-mindedness among faculty members are not a coincidence. Through its recruitment process, the Humanities Division screens for this quality in candidates. Finding people with a broad educational base as well as interest in continual self-education is the hiring challenge of Rodrigue, the head of the Division. The academic credentials alone are not what she is primarily looking for but “people who show some real intellectual curiosity. We look for someone who demonstrates a breadth of learning — someone who maybe majored in history but who loves film and whose hobby might be collecting butterflies ... .”

The heavy reliance on exceptional teachers with an unusual constellation of intellectual interests creates a particular vulnerability of the program. These teachers are hard to find and also to replace. Jackson Shafer, a 12<sup>th</sup> grade student, points out that anyone devoid of intense involvement and passionate commitment to learning would affect the nature of the interdisciplinary program and “you would not learn as much.” Ability to be learners in the classroom, not trapped by the vestiges of disciplinary authority, characterized the members of the original design team. Hanas recalls “the degree to which our group was particularly humble, willing to learn from and with one another as opposed to informed by individuals who have so much to say. It was a group that was extraordinarily comfortable with letting go of any expectations that we needed to be experts in what we were doing.”

An essential quality that seems to be part of the profile of a humanities teacher is a learner attitude. Hicks believed that a “teacher’s true competence is not in his mastery of the subject but in his ability to provoke the right questions and get into a new subject quickly and incisively.” He did not discount the value of mastery of “at least one subject” but placed particular emphasis on a “teacher’s peculiar eagerness to explore new subjects and new ideas with his students.” From a good teacher, Hicks expected that students would learn “how to approach a new subject with the aim of mastering it.”

Teachers who, according to Callahan, “pin their identity on the sense that they know the area in depth” and fail to grow beyond that — “I am an English teacher; I can’t teach

history!” — do not do well in the new humanities. “Humanities teachers who succeed,” notes Rettew, “are the ones who are able to take chances, to disclose their own lack of total knowledge of the domain.”

Luckily, dealing with fear of not knowing is something that many teachers learn how to do. Working through that fear gave Dale some wonderful moments of realization. “It’s okay to make a mistake. It’s okay to be the human being in this classroom. It’s okay to admit that I don’t know a lot about this, but I do know more about this,” she said. It was also liberating for her and some others to realize that “in fact, the skills that a teacher might have can stretch across disciplines, even though you might need to learn more.”

Czarnecki sees the anxiety of not knowing as something constructive. She explains, “I try to ask at least one question in class that I genuinely don’t have the answers to. Like today, I really didn’t have the answer to whether the painting *American Gothic* is an homage or a satire. I think it’s okay not to know.” Carter illustrates this point further,

Today I had a student argue with me about Nixon. Nixon, to me, is the biggest crook. How can you possibly put him on the list of ‘Democracy in Action?’ And the student said, ‘You should because he proves that democracy works, because he was caught.’ And I said, ‘You know what — you are right! In a weird way, you are right.’ A paradigm shifts. He proves democracy works because democracy proves that he is NOT an omnipotent man.

As she describes this classroom experience to me, I am aware that she is still incredulous of this turn in her own thinking, still trying to recognize and learn from the student’s point of view. The ability to learn and admit ignorance is, of course, a hallmark of a good teacher in general, but the interdisciplinary process makes it a requirement.

Thus, breadth of interests among teachers and their ability to be learners in the classroom are the essential foundations on which dialogue, which is crucial for the interdisciplinary curriculum, is built at St. Paul’s. No less important is providing teachers with real opportunities to meet on a consistent basis and engage in conversations with each other. The combination of both factors, teachers’ commitment and administrative support, increases the likelihood of the success of an interdisciplinary classroom. Hanas sums up as follows:

One of the strengths of the program is that it creates a forum, an extraordinary forum for collaboration and for reflection, the very thing, which so many of our school communities struggle to create. Imagine what it is like for a group of students who are surrounded by this group of adults who are not merely going through the motions but who are so fully engaged in conversations with one another, whether in disagreement or agreement, brainstorming, whatever stage they happen to be in. Learning is alive and well in that environment. Even in the face of administrative adversity, bumps, transitions, scheduling constraints — it’s a terrific model of what the community of learners ... ought to aspire to.

Through a lucky concentration of open minds and resource allocation, St. Paul's was able to make strides toward the creation of such a community in its interdisciplinary humanities.

## **Conclusions**

### Interdisciplinary humanities as the product of unique institutional and personal commitment

The interdisciplinary humanities program at St. Paul's School appears to be here to stay. It is sustained by unique personal and professional commitments of its faculty members and through considerable administrative and institutional backing. Both help create a classroom in which central issues of humanity become elucidated through deep and multi-lens inquiry. The school's dialogic culture provides a foundation for this interdisciplinary curriculum. Another essential factor that ensures quality of this complex program is its faculty members who embrace many intellectual passions and can sustain the level of interactivity and intellectual intensity that the program requires.

The connection among disciplines, aligned to answer a central humanistic question (e.g., Who am I? What is my role in the world?), appears to be seamless and does not typically invite deliberate investigation of differences among disciplines. This stance may represent a natural tendency in the design of the interdisciplinary programs in the humanities. The epistemological proximity of other disciplines such as history, philosophy, and literature might even make explicit discussion of differences among them in the high school classroom seem artificial or added-on, especially if the teaching is driven by the goal of developing character and bringing "humanity" into the humanities. However, despite the lure of bypassing disciplinary knowledge and making superficial connections that seamless integration of disciplines may foster, the St. Paul's humanities program maintains a high standard of disciplinary learning. Teachers struggle to ensure that arguments are well-grounded in literary and economic theory or are soundly supported by visual or historical data. Students struggle to attain solid disciplinary understanding and a well-informed synthesis of ideas.

Dialogue among teachers helps to create a community of disciplines in the classroom. The discussion that arises from the confluence of disciplinary views generates a polyphony of student voices that persists in the dorms, on the soccer fields, or in the interior of the students' minds when they are alone with a book. The dialogue among teachers stimulates students who learn to host and harmonize many views on the same issues. The community that exists in the school may be the seedbed for the interaction among teachers in the humanities, which in turn might nurture a community of ideas and disciplinary perspectives in the minds of students.

### Effects of an interdisciplinary classroom on the learner

“I think our mission as a high school is simple,” states Rodrigue. “Do [students] read carefully? Do they have some foundational knowledge that they can build on when they leave here? Can they find information they need? Can they navigate the technology, which I think is increasingly critical? Do they know how to assemble information? That’s one thing I think interdisciplinary study does.” This mission is in keeping with the ideal of classical education that Hicks wanted to promote through interdisciplinary humanities. “General curiosity, imagination in forming hypotheses and method in testing them, mark the classical spirit of inquiry,” he writes (1981). “This bend of mind allows the educated man to go on educating himself or extending the realms of knowledge for his fellows.”

More than building a factual knowledge base, the emphasis of an interdisciplinary program seems to be on developing this “bend of mind,” or meta-thinking skills, that allow students to remain learners and seekers of information. More than becoming history or art students, graduates of the program are prepared to become expert sifters, searchers, and synthesizers of knowledge. Student Drew Camarda characterizes this shift toward tracing of connections between everything as a kind of loss of innocence: “I can’t see the film just for its own sake anymore. I have to compare it to other things we were discussing, other movies I have seen, other books I have read.” An extension of this analytical and synthesizing quality of students’ thinking that was repeatedly reported is their ability to apply knowledge to new contexts. “It was not at all uncommon,” remembers Hanas, “for students to be running to us — those of us who were on duty in the dormitory — to say, ‘Hey, I just read this’ or ‘I just saw this on television or this film, and it reminded me of that. Can I incorporate that into my paper?’”

The sense of being eligible for an important or “serious” conversation, the sense of a greater ability to organize and manage the information and empowerment to rise above disconnected facts and generate an independent personal view, stimulates cognitive and social growth in the humanities student. “You simply have to think more,” May Alston comments. “Everything isn’t fed to you.” She also notices that analytical ability allowed her to “come to conclusions more quickly. . . . I can use one principle that’s given to me in humanities class and apply it to all of my writing.”

The most often reported quality of the humanities program is its relevance to students’ lives. In the interviews, students commented on how issues raised in the humanities classroom went to the core of their personal values and beliefs and caused them to reassess or reconfirm those beliefs. It wasn’t learning as usual, which leads to the increase of the informational database. Rather, as Shafer points out, it was more directly linked to value systems than any other courses he has experienced. Alston says, “It’s about the human condition. Teachers in the humanities are trying to make you understand yourself . . . . It’s very much about teachers helping you open up the things that you identify in yourself as well as in characters and books and stories and history.” This statement validates the core goal of the program which originated from the desire of its founders to “civilize the next generation of young people” rather than “introducing them

to a formal discipline,” according to MacNeil, who credited both Hicks and moral philosopher Martha Nussbaum with this vision.

The St. Paul’s humanities curriculum quite expressly puts humanistic questions at the center of the discussion as a meeting point of various disciplinary interpretations. Teachers explicitly lead the discussion to the here and now of students’ personal experiences. In turn, personal experience becomes the high point of synthesis. The self, with its emotional and rational drives, is the realm in which history, philosophy, and literature are ultimately interpreted. The self initiates connection-making in the collected data and verifies those connections.

The educational benefits described above, however, are not equally distributed among students. Some of them clearly struggle with this form of learning. “A parent wrote me just last week,” Rodrigue recounts, “to say that her son likes to learn linearly. Just give me dates, give me events, and just let me memorize them — and there’s a lot of comfort in that and a lot of closure in that. This is a curriculum that doesn’t provide closure — it’s not designed to. It’s designed instead to create sort of the maximum opportunity for continuing education.”

Rettew lists the following thinking dispositions as essential for an interdisciplinary learner: “Willingness to take risks, to explore in a slightly more open-ended manner, to derive pleasure from the process as well as the product of their assignment.” He continues, “[Learners] also need to be at ease in having a few gaps in the story. A student who is really anxious about having the timeline populated by the hashmarks every 50 years and what happened then, that’s not the kind of student that’s going to have it easy.” Instead, Rettew observes, an interdisciplinary learner needs “to wander around more elliptically and return to common themes while building a store of knowledge and references. . . . To understand allusions and shared knowledge, to be self-directed in one’s work. A good collaborator as well as a sharer. An inquiring mind comfortable with lacunae and ambiguity as opposed to very needy of precision and clarity.” These are the qualities he believes define a successful humanities student.

Teachers see it as their responsibility to find the right pedagogical strategies to bring students of different intellectual abilities into the circle. “You have to frame questions the right way to allow this kind of thinking that will nurture itself,” Pook says. Rodrigue, for example, gives “frequent quizzes” designed for students “who just want to be rewarded for knowing the facts.” After the students have mastered the facts, she tries to build on their “good foundational knowledge” and ask them to make connections. However, differences in the intellectual profiles of students make their imprint on the degree to which they benefit from the interdisciplinary program.

The effects of the interdisciplinary curriculum on students’ social, cognitive, and personal development need to be further substantiated and elaborated. Further inquiry into these effects would be justified by a promise of an interdisciplinary curriculum of high quality. Hanas describes this promise well: “Students who were a product of this kind of program are in a particularly strong position to be able to see, to hear, and to understand what is

before them. Whether it is something in nature or a personal human relationship or in two assigned texts. And when the understanding doesn't come in one of those lightbulb-like moments, I think they're particularly well-adept at knowing what to do in response, at how to work with whatever it is that's before them." This makes the effort needed for the creation of interdisciplinary programs like St. Paul's all the more worthwhile.

## Summary of Findings and Practical Recommendations

St. Paul's experience in designing an interdisciplinary program in the humanities may be instructive for future curriculum designers, teachers, and administrators. Below is a headline summary of some of our findings regarding pedagogy and institutional supports.

### Pedagogy and curriculum

- *Interdisciplinary education enhances disciplinary learning.* While tensions between the two modes of teaching on the same campus are real and natural, they can be channeled to stimulate productive, mutually beneficial dialogue between disciplinary and interdisciplinary learning.
- *Interdisciplinary curricula ought to be antithetical to broad and often superficial coverage of material and focus on a few central topics instead.* Such a program goes after a few texts rather than a wide coverage of topics in chronological sequence. As coverage is a concern for most schools because of standardized testing, interdisciplinary programs may need to be explicit about their approach with crucial constituencies and devise compromise solutions like tutoring students to prepare for certain tests. A focus on the time-proven goals of liberal arts education — deep reading, good writing, excellent communication skills — may be a way to win support for the development of an interdisciplinary program.
- *A single teacher model in an interdisciplinary classroom allows teachers to model learning for students, by taking them out of the expert mode.* Single teaching, however, relies heavily on collaboration behind the scenes and teachers' learning from one another.
- *An interdisciplinary program relies on increased interactivity among faculty members, which requires space and time for consistent interactions.* Weekly meetings provide a crucial opportunity for teachers to design and refine curriculum, develop assessment criteria, and support one another.
- *An interdisciplinary curriculum may call for scheduling changes.* Research and writing time may need to be added to class time. Teachers also need more time to meet during the day to design and refine the coherent curriculum.
- *Transition from traditional curriculum to an interdisciplinary curriculum could be difficult for some faculty members.* Some faculty members may not adapt well to new forms of teaching as it involves more risk, collegiality and openness to learning. Thus, it may be reasonable to introduce changes gradually and expect that some faculty members will leave or need a period of time to adapt.
- *Technology can help and support interdisciplinary teaching.* It can 1) provide research material through Internet connections; 2) make individual work sharable and

accessible for collective critique; 3) bring different media together; and 4) promote crucial writing skills.

- *Assessment of interdisciplinary work is difficult, and the need to develop standards for judging the quality of connections is a pressing challenge.* Being aware of how students support their interdisciplinary associations and write about them may be a place to start. Making grading a collective effort and involving students in setting the standards of good interdisciplinary work may be a useful strategy.

### Institutional supports and commitments

- *An interdisciplinary program requires support both from the top (administration) and the bottom (faculty).* The survival and success of an interdisciplinary program may depend on a combination of a well-articulated philosophy, a practical plan of administrative support, and a strong grassroots commitment on the part of the faculty.
- *An interdisciplinary program is time- and labor-intensive.* The increase in research and writing time may require lower course loads along with more preparation time. Teaching an interdisciplinary class may take more time and thus require longer class periods. Continuous support and attentive nurturing from the top is very important for the success of an interdisciplinary program.
- *Special attention should be paid to faculty recruitment to ensure a sustained level of commitment.* While expert knowledge in the field and teaching experience could be easily added or expanded, interest in crossing boundaries and willingness to take risks and integrate life experiences into the classroom might be hard to cultivate in teachers. Attention to a candidate's extracurricular interests, his or her appetite for learning, commitment to fostering students' humanity - and not just intellect - should not be overlooked in the selection process. A good expert in the field may or may not be a good interdisciplinary teacher.
- *While interdisciplinary teaching is deeply rewarding to teachers, it could also be intense and challenging.* A higher degree of interactivity with students and colleagues, continual learning, and high mutual accountability in the collective grading process may result in stress and burnout. Teachers need smaller course loads, more preparation time, and opportunities to meet and support each other.
- *Interdisciplinary learning is process- rather than product-oriented.* It impacts students' general thinking and research skills, as well as enhances a sense of broader responsibility.
- *An ability to evolve and continually reinvent itself should be built into an interdisciplinary program.* An interdisciplinary program needs to stay open to "unanswerable questions" and unpredictable connections. Locking into one philosophy of teaching or into a certain set of texts or topics is antithetical to interdisciplinary inquiry. An interdisciplinary program should be given room and resources to make mistakes and try new ideas.

This list is not at all meant to be prescriptive or complete. It is meant to invite further collective thinking. The St. Paul's School does not hold all of the answers for a model interdisciplinary program in the humanities. As Dale notes, its experiment is "far from

complete ... . It's constantly evolving." Her hope is that the dynamic interdisciplinary inquiry in the humanities will go on and that the moment of complete settlement will never come.

## Bibliography

Anderson, C. (January 25, 2000). *Elements of Vision (Part II): A View of the Present*. Retrieved June 25, 2001, from

<http://www.sps.edu/news/rectorstory.asp?rectorid=907932991>

Anderson, C. (May 1, 2000). *Elements of Vision (Part III)*.

Retrieved June 25, 2001, from

<http://www.sps.edu/news/rectorstory.asp?rectorid=957209693>

Bakhtin, M. M. (1981). *The dialogic imagination: four essays*. Austin: University of Texas Press.

Boix-Mansilla, V., Miller, W.C., & Gardner, H. (2000). On disciplinary lenses and interdisciplinary work. In S. Wineburg and P. Grossman (Eds.), *Interdisciplinary curriculum: challenges to implementation* (pp. 17-38). New York: Teachers College Press.

Academic Schedule Study Committee, *Final Report from the Academic Schedule Study Committee* (May 7, 2001).

Gardner, H. (1999). *The disciplined mind: What all students should understand*. New York: Simon & Schuster.

Hicks, David V. (1981). *Norms and nobility: A treatise on education*. New York: Praeger.

Lawrence-Lightfoot, S. (1983). *The good high school: portraits of character and culture*. New York: Basic Books.

Mansfield, K. (1988). *The garden party: Katherine Mansfield's short stories*. London: Hutchinson.

Nussbaum, M.C. (1997). *Cultivating humanity: a classical defense of reform in liberal education*. Cambridge, MA: Harvard University Press.

Pelican (April 16, 1993). *Summary of Curriculum Committee Proposal*. Concord, New Hampshire: St. Paul's School.

Rodrigue, C. (1999). *Memo. Re: problems and proposals*

*St. Paul's School Academic Program, 2001-2002*. (1999.) Concord, New Hampshire: St. Paul's School.