

Designing Games for Ethics: Models, Techniques and Frameworks

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Chapter 15

Leveraging Digital Games for Moral Development in Education: A Practitioner's Reflection

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ABSTRACT

Ethical and moral development is a result of cognitive structures generated through experience in the pivotal stage of adolescence, during which formal education plays a critical role. Recent advancements in cognitive psychology have explored the very nature of moral development, as well as the critical role education plays in that development. Digital games are potentially powerful learning environments to shape moral development for students. This chapter describes two case studies of digital games used in a middle school classroom to enhance moral development. Finally, it reflects upon and analyzes these cases using the developmental theories of Robert Selman and others as a framework.

INTRODUCTION

Recent advancements in cognitive psychology have demonstrated that education plays a powerful role in ethical and moral development (more than age alone), influencing one's ability to make sophisticated judgments using moral reasoning (Fischer, Yan & Stewart, 2003). Specifically, adolescence is seen as a critical period where one's development in these areas is framed for

adulthood: "These are the years not only for learning specific social skills and strategies but also for the growth of our capacities for social understanding and empathy" (Selman, 2003). As a result, in our experience, many teachers concerned with student moral development seek tools and methodologies that help them positively shape this with their students

As digital gaming is increasing in acceptance for use in education, practitioners have begun exploring their potential to develop a classroom environment that will facilitate experiences to

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support healthy community and interpersonally oriented moral development—developmentally appropriate progression as “children become socially wise” (Selman, 1980, p. 311) New and emerging web-, computer- and console-based games and simulations can provide further support to the ethical development that pushes early adolescents to coordinate social perspectives, a key foundation for moral development. Within a classroom setting, games can provide both a tangible experience and a structure for intellectual exploration. Certain computer games, while not specifically created for an educational purpose, could potentially be a powerful platform for exploring and guiding the complex relationship that exists in an individual and in groups between thought and action—ultimately helping to shape ethical development at this opportune stage of development.

This chapter describes a case study on the application of such technologies to promote positive community and interpersonally focused moral development, combined with an analysis of the literature on human development of ethics. We argue, through our observations and reflections on the use of computer games in the classroom, that some games have the potential to be a powerful platform for promoting ethical development during the critical stage of adolescence.

Ethical Development

What are ethics and how do they develop? The fields of psychology and cognitive development have much to offer our understanding of ethical development, and therefore we will define *ethics* from a psychological perspective:

A set of principles derived from personal experience and informed by cultural mandates informs ethical behavior; contextual variables challenge these principles, and a highly ethical person will integrate awareness of himself and of others, to recognize how different contexts affect his thinking

and action, and then act from consistent principles despite diverse contexts.

In essence, “ethics” is one’s “operating system” for navigating interpersonal and intercultural relationships and behavior. The field of cognitive psychology has made incredible advancements in the last several decades, with an increasing focus on understanding the nature of moral development. Researchers have found that this area of human development in particular is considerably influenced by the individual’s surrounding environment—in particular education, where the environment has a structured purpose and focus (see Colby, Kohlberg, Gibbs, & Lieberman, 1983; Dawson, 2002; and King & Kitchener, 1994). Critically, leaders in this field note that a “stimulating environment *must* catalyze the development of the highest stages of moral and reflective judgment, and it may be essential for other domains of adult development as well” (Fischer, et al., 2003). Therefore, not only must moral development not be left to chance, but education has a powerful position in affecting the nature of that development for students.

This literature suggests three central components that build an “operating system” for ethical behavior. Developmental psychologist Lawrence Kohlberg was a pioneer in this area through the 1960s and 1970s, and concluded that human psychosocial competence (including ethical development) lies in the ability to see another’s perspective (Kohlberg, 1969). Therefore, *social perspective-taking* “is critical for the growth of moral reasoning” (Selman, 2003). Selman, building on Kohlberg’s work, saw that in addition to perspective-taking, “. . . a second key assumption was that *positive peer relationships* are an essential environmental or social condition for this growth” (Selman, 2003). In other words, how one negotiates interpersonal actions affects the positive outcome of peer relationships directly. Finally, Selman suggests a third key component of psychosocial competence: *Personal Meaning Awareness*, which addresses the question: how

insightful is an individual at reflecting on emotions, actions and relationships for given social interactions or experiences? This is a higher level of development, where the individual is able not only to view herself from an outside observer’s perspective, he uses this knowledge to construct understandings of his behavior that shapes future interactions.

Before examining each of these components more critically in the next three sections, it is useful to talk practically about what we are discussing. Every day, each of us behaves and interacts in the world, and with others. In any given context, one decides how he or she will respond in that context depending on her ability to take another’s perspective, to sustain positive peer relationships, and the sense one makes of that given situation or context (which puts together numerous variables about the world and others). One’s developmental level in each of these three domains (described further below), as well as how those converge, determines the nature and extent of one’s behavior to be ethical. To support this, we explore each of these domains more fully below.

Social Perspective-Taking

As a child grows up, she moves from being able to understand herself from her own perspective to being able to understand and coordinate the

perspective of others. Very young children are egocentric and most often do not understand that others view the world differently than they do (Selman, 1990). As a child grows, he begins to understand that others have a perspective different from his (Selman, 1990). Next a child begins to understand that another person has a perspective on whom he is, while also knowing that his perspective on another may be different than how that person views him or herself (Selman, 1990). Finally, a child will come to view the perspectives of one relationship within the context of multiple relationships; it is this developing ability to understand perspective that informs how children act interpersonally and within a community (Selman, 2003).

Peer Relationships & Negotiation Strategies

Interpersonal actions are based in part on a child’s ability to coordinate their social perspective-taking. A child will connect to others on an emotional level, or relate to them, in varying degrees (see first column in Table 1). The child will also assert herself, or act within the relationship, in varying levels as well (see Autonomy Aspect, the third column in Table 1). As a child develops, he or she will progress in these areas from a very one-way, egocentric perspective, to being able to share vulnerabilities and self-identities inter-

Table 1. Repertoire of negotiation strategies. (Adapted from Selman, R., (2003)

Shared Experience: Relatedness Aspect	Social Perspective Coordination Levels	Interpersonal Negotiation Strategies: Autonomy Aspect
Unreflective Imitation or enmeshment; lack of differentiation	Level 0: Undifferentiated, egocentric	Physical force: impulsive fight or flight or freeze
Unreflective sharing of expressive enthusiasm	Level 1: Differentiated, subjective	One-way, unilateral power: orders or obedience
Reflective sharing of similar perceptions and experiences	Level 2: Reciprocal, self-reflective	Cooperative exchange reciprocity: persuasion or deference
Empathic sharing of beliefs and values	Level 3: third-person; Mutual	Mutual compromise
Interdependent sharing of vulnerabilities and self-identities	Level 4: Intimate, in-depth; Societal	Collaborative integration of relationship dynamics (commitment)

dependently. As autonomy develops, a child will move from impulsive fight or flight actions to using the commitment of a relationship to grow the relationship itself (Selman, 1990).

Personal Meaning Awareness

Personal meaning, like interpersonal negotiation strategies, also develops along a core of social perspective coordination. Meaning is created in a way that is oriented toward the self (autonomy) or toward a relationship (intimacy) (Selman, 2003). It can contain either positive or negative judgment, and it develops in parallel to perspective-taking. At basic levels, an individual’s personal meaning is dismissive. It develops first through rule-based awareness, then to need-based awareness and finally, to an insightful awareness that integrates orientation and judgment (Selman, 2003). Understanding how a child connects her personal meaning with her ability to coordinate perspectives is key to understanding her social interactions. Selman explains,

“At any given moment in time—or in any given place—the personal meaning that an individual makes of the risks involved in a social interaction, incident or relationship provides an important key to understanding whether there will be a gap between the individual’s level of interpersonal understanding and his or her level of actual social action” (2003, p.45).

Personal meaning, then, is the bridge between thought and action. As one’s ability to negotiate relationships develops, and as one coordinates perspectives with greater complexity, an individual is likely to have increased positive interpersonal behavior as these two components are then integrated with personal meaning to create overall psychosocial competency (see Table 2). As each psychosocial component develops in balance with the other two, a person develops overall psychosocial competency.

Depending on the context, a more developed sophistication of personal meaning will lead to contextually successful outcomes. As an indi-

Table 2. Personal meaning awareness of behavior: “Fighting.” (Adapted from Selman, R., (2003)

Level	Orientation to Self (Autonomy)		Orientation to Relationship (Relatedness)	
	(Pro) Positive	(Anti) Negative	(Pro) Positive	(Anti) Negative
0: Dismissive	It’s fun beating up on people.	Fighting is stupid.	Fighting is cool.	Only jerks fight.
1: Rule-based Impersonal	You have to fight to survive.	Fighting only gets you suspended.	Everyone looks up to those who can fight; they’re tough.	Fighting makes you unpopular.
2: Rule-based Personal	I’m a good fighter.	I promised myself never to get into a fight.	Our family is good at fighting; my cousin taught me how.	My girlfriend won’t have anything to do with me if I get into a fight.
3: Need-based Personal	I fight when I’m tense. Anything will set me off.	I don’t fight because I wouldn’t respect myself.	If anyone insults my family, I’ll fight to defend them.	I worry what others think of me if I fight.
4: Need-based Integrated	Part of what allows me to keep calm under pressure is the awareness that I will respond if provoked, but sometimes I may have to fight back or may even just lose my temper.	Violence is not a part of me, but I might use it as a last resort, rather than sitting on my hostility and having it expressed elsewhere.	I live in a violent neighborhood, and I have to adapt whether I like it or not, but I don’t believe in fighting to solve problems, and it goes against my nature.	I seem to need to keep proving to people that they can’t push me around, but I wish there were a better way.
Integrated	I used to tell myself that I needed to fight to survive in this neighborhood, but I took a real good look at myself and realized I need to look cool to cover up.			

vidual's personal meaning awareness becomes more insightful, he/she is able to understand variables within interpersonal and intrapersonal constructs that affect one's actions in any context. This insight underlies a set of principles that guides ethical behavior.

To summarize, the collective work of Kohlberg and Selman frames ethical and moral behavior as the result of three components of psychosocial growth (see Figure 1):

- The ability to see and coordinate others' perspectives (Social Awareness)
- The ability to form positive relationships with peers (Repertoire of Negotiation Skills)
- The Awareness of Personal Meaning

If we seek an ethical society, then we must support moral development at the opportunistic stage of development that is puberty. Educational endeavors to achieve such goals must work to develop the three aforementioned components in all students. By addressing three areas of psychosocial competence – Social Awareness (perspective taking), Repertoire of Negotiation Skills, and Awareness of Personal Meaning – a teacher can promote the growth of Social Perspective Coordination that is the heart of a system of ethics and moral reasoning. Teachers can guide students to actions that are ethically grounded for

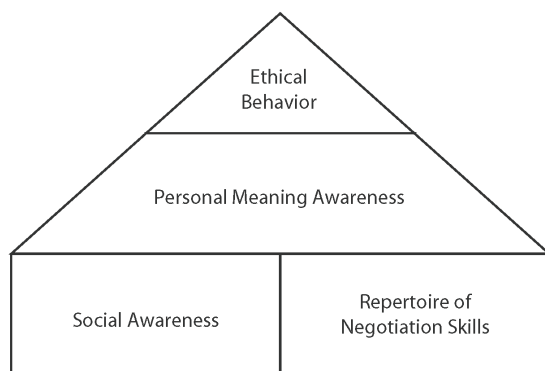
any given context. Through the active promotion of self-exploration and interpersonal awareness in the classroom, students grow to understand the interplay between who they are in any context, who others might be, and how the interplay can be molded by ethical reasoning rather than by “a multiplicity of tendencies inside, which are activated by this or that context” (Brooks, 2009). Students who are socially competent will become persons who know themselves and act ethically in all the contexts of life.

In the complex dynamic of the structured classroom, it cannot just be assumed or left to chance that along the way students will begin to build the foundation of ethical behavior, including the accommodation of others' perspectives, the formation of positive peer relationships, and the creation of personal meaning. With this framework in mind, what classrooms activities, peer experiences, and tools can help students develop these skills and become ethical citizens in the classroom and beyond?

Developing Ethical Behavior in the Classroom

Even within the most structured classroom, social interaction is dynamic and complex. The nuance of body language, eye-contact, feelings left over from recess, daydreams of after school plans, or how to manage this weekend's first date at the cinema feeds this complexity. For some students who feel awkward in their relationships and who may not understand the social cues of others, a classroom's dynamic may dampen social interaction: the teacher is in charge and the task is to learn the lesson; the complexity of social interaction may be avoided by those who so desire. Therefore, in a structured classroom, students may not have much opportunity to practice the two key foundations for a system of ethics and morals: perspective-taking and positive peer relationships. An experiential educational tool can provide the needed platform from which first to

Figure 1. Framework for ethical development



build relationships and perspective, and then to foster the growth of ethics from this foundation.

A suitable experiential tool must consider Selman's model: through shared experiences, children develop a repertoire of negotiation strategies that allow them to exercise autonomy in a relationship (Selman, 1990). At the same time, the shared experience itself creates a sense of intimacy with others (Selman, 1990). A balance between relatedness and autonomy is foundational to a relationship. In addition, as students integrate their negotiations and experiences, their success prompts them to progress from understanding their perspective alone to being able to see the world from another's view point and perhaps even to understanding the interplay of community and the individual (Selman, 2003).

We argue that all gaming platforms can potentially support moral development within a classroom dynamic. They are a pedagogical tool that bridges the gap between the traditional structure of a teacher-led classroom and the potential chaos that may ensue when adults are completely absent. They allow for the practice of interpersonal negotiation strategies through chat functions or through cooperative problem-solving. They provide a space that scaffolds relationships and consequently fosters the growth of perspective-taking. Finally, it is through a computer game's capacity for detailed record keeping and management of logistics, that a teacher is allowed behavioral management time and class reflection time to promote self-understanding or personal meaning that informs the connection between thought and action (Selman, 2003). In our experience, since the computer manages the structure of the experience (the rules and the logistics of the game) the teacher is free to facilitate student thinking and development, whereas with non-digital games, a teacher can be quickly overwhelmed with game management and logistics.

In the next section, we describe two case studies of digital gaming in the classroom, using the digital games *Diplomacy* and *Civilization*

IV: Colonization, in an effort to promote positive moral development. These cases include examples of changes in student social perspective taking and negotiating strategies, as well as demonstration of pedagogies used to facilitate this growth at the Shady Hill School.

GAMING IN THE CLASSROOM: A CASE STUDY OF ETHICS DEVELOPMENT

With these beliefs about the potential of digital game-based learning for ethics development in the classroom, we set out to structure to classroom experiences that leveraged these technologies at the end of the academic year. Prior to beginning these activities, observations were made by the classroom teacher in regards to the students' current levels of Personal Meaning Awareness, as well as many of the common negotiation strategies demonstrated in and outside the classroom. We then collected qualitative and anecdotal evidence of changes in these during and following the game-based learning experiences.

Curricular Setting

Shady Hill is an independent Pre-K through 8 coeducational school in Cambridge, Massachusetts. Many of its students come from middle and upper income families where a thoughtful education is valued above one that is standard driven. The school teaches content through the interdisciplinary approach of Central Subject. The Central Subject method integrates literature, art, history, geography, and music to provide a year of study that emphasizes depth of learning, mastery of content and understanding of theme. Throughout their career at Shady Hill, students explore both academic content and also what it means to be a member of a community.

For any teacher, the choice of what materials to use in the classroom starts with how well it fits

the program of the school. Given the academic rigor of the Central Subject method at Shady Hill, teachers develop their own lessons to revolve around a set of through-lines or themes that form the background conceptual knowledge for the year. The result is a program that uses content to develop a flexible process of learning and acquisition of ideas for Shady Hill students, who are then guided by their own thinking. Throughout Shady Hill there is emphasis on developing the ability to understand issues and events from another's perspective.

The School:

Challenges prejudice, respects difference, and recognizes that multiple perspectives inform human experience

Encourages children to be independent thinkers who can transform ideas into meaningful action

Advocates learning through cooperation and collaboration

– Shady Hill School Mission, 2010

A teacher at Shady Hill (as well as all other middle schools we have encountered) must then provide academic content while also exploring morality and ethics. To be clear, we are not researchers, but practitioners, and we have structured our own reflections based on experience with the work of Selman et al, as well as familiarity with experiential education programs like Outward Bound Expeditionary learning or Project Zero where students learn social interaction and group dynamics through active gaming. As with many teachers, our methodology arises from the demands of the moment, a need for a tool that will provide academic content, promote social interaction and allow us to teach rather than to manage. We made daily observations of our students, collected their work and used it to assess their progress. In thinking about how to teach ethical behavior better, we returned to these classroom

observations and assessments and applied our understanding of Selman's theories to the interactions we had observed. We want to make social behavior more teachable, and we want students to be aware both of themselves and of others. We assume that, throughout the school day, there are many opportunities to foster moral growth, but we want to discover a more intentional approach. At the heart of morality, we believe, are the day-to-day interactions that occur between us all. Our job as teachers is to promote the development of an ethical system that supports community oriented morality.

In the seventh and eighth grade we chose to play two games in particular, *Diplomacy* and *Civilization IV: Colonization*. The seventh grade curriculum centers on the colonial period of American history, hence our choice of *Civilization IV: Colonization*. In the eighth grade, the computer-based version of *Diplomacy* helps students understand the complexity of interdependence among European countries prior to World War I. Players face limited room for expansion, the need to gain resources and, most centrally, the dilemma of creating temporary alliances for one team to win. Initially, the decision to play these games was based solely in academic goals. Nevertheless, observations of students while they played sparked our interest in exploring their impact on affective learning, particularly their impact on the personal and interpersonal growth that we believe form the basis of a system of personal ethics.

About *Diplomacy* & *Colonization*

Diplomacy is a strategy game that simulates pre-WWI Europe where players vie to win the war by controlling a predetermined number of key places in Europe. Similarly, *Civilization IV: Colonization* is a strategy game where the goal is to build a colony strong enough and with enough political power to declare independence from its European mother country. This classroom implementation

consisted of one computer running the game by projecting the display on the wall screen for the entire class. Eighth grade students worked in teams of two to develop their game strategy. In *Diplomacy*, there are only four available moves; winning the game depends on successfully negotiating with rival teams to gain territory in Europe. Without successful negotiations—or diplomacy—a team cannot win. Thus, students must work within their teams as well as with members of rival teams to become successful. The game provides the structure to these interactions allowing the teacher to become a facilitator, advisor, referee, and guide. For a class of adolescents, this game is very challenging interpersonally as it requires high levels of negotiation not only to win the game, but also to cooperate with team members while playing.

Originally, *Diplomacy* was published as a board game, however this format can be a bit cumbersome for classroom play. The electronic version makes classroom game play feasible because it facilitates game play quickly and manages logistics. Time and logistical management always challenge teaching, both academic and social.

Played with teams of two, *Diplomacy* becomes much more open-ended and the game dictates success through interaction with other teams. It is this interaction that necessitates the engagement of more sophisticated psychosocial development. At its fundamental level, *Diplomacy* relies on the successful negotiation of conflict to achieve success by controlling most of Europe. Whereas success at *Civilization IV: Colonization* can be found with relatively low levels of interpersonal skill and self-awareness, *Diplomacy* requires sophistication in both these areas. Additionally, *Diplomacy* demands greater capacity for the individual to compartmentalize the experience as a game, a serious challenge for adults as well as children. With this in mind, seventh grade students play *Civilization IV: Colonization* and it is only at the end of the eighth grade year and then only with a class that has demonstrated psychosocial sophistication do students play *Diplomacy*.

The Link between Shady Hill and Selman's Developmental Theory

The basis for our reflection on ethical development using *Diplomacy* and *Colonization* lies in elements of the aforementioned framework of ethical development—which provides a lens to observe and consider how well students develop and maintain relationships to meet the mission of Shady Hill to create “ethical citizens.” *Diplomacy* and *Civilization IV: Colonization* are the tools to structure learning that not only meets curricular goals but also affective goals.

Game play potentially provides an environment to experiment with interpersonal negotiation strategies that foster autonomy. It also provides shared experiences that build intimacy (Relatedness), or “...interpersonal maturity represents an integration of the developmental lines of intimacy and autonomy” (Selman, 1990). The classroom structure of game play provides the environment for this integration. Our assumption, then, is that the ability to form solid relationships with others, where one is able to integrate relatedness and autonomy functions, is one of the most important pieces in the overall ethical development of the individual. Successfully generating this in the classroom requires a certain disposition and approach by the teacher, which is described in the next section.

Teacher's Role in Gaming

The teacher's role and desirable pedagogies with games have been noted considerably elsewhere (see Sandford, Ulicsak, Facer & Rudd, 2006; Sandford & Williamson, 2005; Clark, 2005; and Kirriemuir & McFarlane, 2002). Yet it is worth underscoring that gaming involves complex relationships between players. And, especially for middle school students (who focus on rules and fairness), the digital game provides the parameters for the social area in which relationships occur. As a result, students can focus on playing the game,

or, possibly, they can practice their negotiation strategies, ability to see multiple perspectives, and capacity for personal meaning. By the teacher creating the opportunity for reflection on the game experience builds both an appreciation for different perspectives and an integration of the experience into a system of personal meaning. The result for students is greater social awareness around how actions affect others. Students come to integrate social understanding, awareness of personal meaning and their repertoire of negotiation strategies so that they are more psychosocially competent and, consequently, ethical—as demonstrated by student behavior described later in this case study.

When leveraging games for moral development, the most important consideration for the teacher is to seek games that provide a structured and safe environment for peer interaction. This is especially important given the complex overall dynamic of middle school student development. Negotiation strategies, ability to see multiple perspectives and sophistication of personal meaning, even at higher developmental levels, are especially fragile given the new social demands and the physical growth of the typical middle school student (Erickson, 1950; Selman, 2003). Successfully leveraging digital games to promote moral development requires the establishment of a safe educational environment that is perceived as a ‘safe’ space—where individual and different viewpoints are welcomed—for all participating students. The safer the child feels, the more he can be supported in his moral development (Brion-Meisels, 1978). In creating the initially safe environment, the teacher’s role is to decide when to intervene intentionally to promote development and when to let events run their course.

Playing *Diplomacy* in the Middle School

While *Diplomacy* has the capacity to be an extremely powerful pedagogical tool for developing psychosocial competence, it also presents the

greatest challenge for implementation and facilitation for the teacher. It is a challenge to maintain a constructive level of comfort within a classroom for the duration of the game, because students must function across a variety of interpersonal negotiation strategies while maintaining a societal level of perspective coordination. Simply, students must work the problem of the game through their interactions with peers without becoming angry at their actions. The affective educational goal is to create an intentional experience that allows students to develop social perspective coordination and, therefore, familiarity with the game is essential. Within the context of the game, the teacher can then observe and facilitate the ensuing social interactions using Selman’s work as a guide. For example, attacking an opponent is a relatively low-level interpersonal negotiation strategy where cooperating to expand is higher. *Diplomacy* rewards those students who are able to integrate their understanding of others with their own needs within the context of the game. Further intervention by the teacher prompts students to explore how they might transfer their successes in the game to other contexts. In this sense, as the teacher promotes reflection, students can think about how to apply their social knowledge and skills to other contexts. In this way, through game play, the teacher fosters a set of principles for social interaction that can be accessed across contexts. This is the basis of ethical action.

Games, by their nature, often promote a winner and a loser—they hinge on conflict. This is true of *Diplomacy* as well. In terms of safety, lower level strategies tend to lower the comfort level within the classroom and challenge the opportunity for positive shared experiences. Although students may build their sense of autonomy through unilateral action, the fact that these actions often challenge relatedness functions leads to poor overall psychosocial integration. To introduce a game that often requires unilateral victory threatens the safety of individuals in the classroom and therefore puts psychosocial growth at risk. The role

of the teacher is to guide students through games as simulations of life experiences so that they can develop the successful integration of interpersonal and intrapersonal skills with self-understanding. Again, we view this integration as the basis for an ethical citizen and nowhere are a system of ethics more challenged than when there is conflict.

The idea of conflict even in a game situation disquiets many students while others dive into the challenge with gusto. Most important in the initial stages of the game is that the teacher has already created a mechanism for discussing conflict. In one class, students were required to keep journals of their actions and to report from their journals as a way to reflect on the experience. Shady Hill provides a comfort area in each of its classrooms consisting of plush chairs, couches, and rugs. Regular meetings to discuss classroom issues and conflicts occur in this area throughout the year. Thus, a space and format for discussion have become routine and moving discussion and reflection of the game to this space is natural. In addition, creating teams that balance outgoing students with more introspective students as well as matching students with computer experience (especially gaming) to those who have less can add intentionality to the experience that fosters a positive experience. For example, one pair consisted of a quiet student who had strong technology skills and another student who was particularly outgoing and well-liked. This complementary pair not only interacted with other teams, it also developed as its own team. The quiet student became more outspoken while the more outspoken student developed a greater appreciation for technological skill.

Outcomes and Discussion

Students advanced on levels of personal meaning awareness behavior.

On the broader classroom level, the class ultimately agreed that each country could maintain a

set number of key centers and that, since this had been achieved, the game would end with everyone winning. In this game there was a core group of students who had a sophisticated knowledge of the game and there were those who could operate across both the autonomy and relatedness levels of interpersonal negotiation comfortably in other contexts. This core group, through teacher facilitation and reflection, created an experience where nearly all students were able to engage personal meaning awareness at the need-based, integrated level in many contexts (see Table 2). As students did become frustrated, members of this core group would work to bring those frustrated back into the game through interpersonal negotiation. The effectiveness of these negotiations depended on the facility with which these students could integrate their ability to see the perspective of others and then base their persuasion on corresponding strategies:

“I hate this game.”

“But you have to play because it’s part of the class.”

The response to the Dismissive reaction to the game is to approach the negotiation from Level 2: Rule-Based and Impersonal. Instinctively by the student, the persuasion is aimed one level higher on the Personal Meaning Awareness scale (see Table 2).

“I don’t want to play this game because Bob will hate me if I attack him”

“We’re playing this game to learn about history and it’s only a game anyway. You can make it up to him at recess.”

The game play fails when students are not able to integrate psychosocial functions such that a response to “I hate this game” becomes “yeah, it’s stupid.” At this point neither student is able to engage in the game and both are mired at the Dismissive stage of Personal Meaning Awareness

(see Table 2), that is, they are so frustrated that they cannot continue with the game. The teacher may then step in to assess where and if the integration of psychosocial functions has broken down, or if the game is just too complicated to understand.

Many Students Advanced in Their Capacity for Negotiation and Using Negotiation Strategies

Although the game began as a unilateral contest to acquire segments of the board, the nature of this class soon moved many students (but not all) to realize the power of cooperation and, ultimately, to integrate the needs of everyone to redefine how to win the game in order to maintain the positive cohesion of the class.

Discarding *Diplomacy's* traditional goals for winning in favor of a more community oriented set of conditions appeared to result from a core group of students successfully integrating the 3 domains discussed in the introduction to this chapter—their Personal Meaning Awareness, their repertoire of Negotiation Strategies, and Social Awareness or perspective-taking. They were cooperative and empathic within the awareness that they would continue to be classmates even when the game ended and would need to maintain positive relationships. Their negotiations considered both the goals of the game and of maintaining peace and comfort in the classroom. They were able to assess their own comfort and that of their classmates and integrate these self and other perspectives to arrive at a mutually successful goal...

Generally, however, *Diplomacy* does not elicit such high level outcomes. Simply, it demands a level of psychosocial integration that is above

most students. The most common issue involves students who disengage. Often those to disengage first are either those who do not buy into the game, or those who are less able to engage in successful interpersonal negotiations. In failing games of *Diplomacy*, either students do not possess sufficient levels of psychosocial integration or they do not apply their sophistication to the context. For example, the post-game comment of student #3 suggests that he just wanted to win and that he is not satisfied with the mutually beneficial outcome developed by his classmates. *Diplomacy* as a classroom tool fails when too many students become angry or frustrated with the game and their classmate's play. Intervention by the teacher can then target interactions among students to promote higher functioning first for in-game relationships and self-awareness and then during post game debriefing and reflection sessions. Teacher prompts during reflection have ranged from addressing specific situations to reminding students that the game is a class requirement.

As already mentioned, one set of students was able to change the rules of the game to redefine success on their own terms. By not wanting “to leave anyone out,” this group was considering a broader social context for the game. This allowed for discussion around the larger experience of the eighth grade at Shady Hill. Eighth grade is the last year at Shady Hill School and some students are involved in an application process to independent high schools. This process necessarily involves a degree of competition with classmates as they apply to many of the same schools and there are limited places available. Students explained during discussion that, in a sense, this application

Table 3. Player quotations pre-game versus post-game

Student	Pre-game	Post-game
Student #1	“Let’s take all of Russia from player # 4”	“We can’t just take the places we want because we needed help.”
Player #2	“We’ll need to work with player #6 and player #5 to take	“We realized that we didn’t need to get all the supply
Player #3	Italy”	bases to have a successful game. We wanted to make sure
	“Awesome! Let’s take out all of Europe.”	that no one got left out. It’s just a game.”
		“Yeah, but no one won...”

process mirrors the game of *Diplomacy*, in that, Shady Hill students must work together during the school day, but they recognize that the independent schools to which they apply are judging them against one another. In *Diplomacy*, students explained, they must work together, but ultimately the game determines a winner by who gains the most supply centers.

Student 1: “*Why did you attack Galicia? I thought we were allies?*”

Student 2: “*Well we were, but someone has to win.*”

Teacher: “*How is this like life?*”

Another student: “*What do you mean?*”

Teacher: “*Well... often we have to compete to win and at the same time maintain our friendships... or at least try not to fight with one another.*”

Another Student: “*Yeah... kinda like the ‘next schools’ process... I mean we are all Shady Hillers but we have to get into high school and they can’t take us all. So even though we’re classmates, we’re still in competition.*”

The teacher in this case has moved the experience across contexts. Game play has become more relevant from a personal meaning standpoint. Personal Meaning Awareness is moved from Need-Based Self-oriented (autonomy) through a more Relationship Orientation (Relatedness) to Insightful [Level 3 through to Level 5 on Table 2].

The experience had a larger impact on students at more advanced levels of Personal Meaning Awareness and negotiation strategies.

Those students who were better able to integrate autonomy and relatedness functions in their negotiations and develop more insightful personal meaning proved more successful during the *Diplomacy* game play. The abridged conversation recounted above went on for some time before the cross context realization appeared

and depended on the already high level of social awareness integration of the students. Successful intervention by the teacher or by classmates, however, can promote more highly developed social perspective coordination which, in turn, leads to a more complex, better informed and more easily contextually diverse set of ethical principles. It is not enough for a teacher to tell a student to do the ‘right thing’. Experiences and guidance must be in place to teach how to do this. These tools must also be mindful of students’ psychosocial development. *Diplomacy* provides an affective learning experience for those students who are relatively highly developed. It is also an excellent assessment of high levels of psychosocial integration and the consequent set of ethical principles.

From this application, *Diplomacy* proved its capacity to provide a safe learning environment while also presenting conflict that provoked development of the three domains we include in moral and ethical development. Effects of this were seen across the class, with the largest impact demonstrated in students with more advanced levels of social perspective taking, personal meaning awareness, and negotiation strategies. Future work would include building more direct strategies to engage students at less advanced levels in these domains.

In the next section, we will describe the use of *Civilization IV: Colonization*, and how it compared to the outcomes of the use of *Diplomacy*.

Playing *Civilization IV: Colonization* in the Middle School

Students in a seventh-grade middle school class played *Civilization IV: Colonization*—a strategic level, multiplayer game—over a LAN system. Working in pairs, they would play one of several teams available in the game with the goal of becoming the first to gain independence from the mother country. Students’ interactions with other teams are fixed within the parameters of the game. They can trade, negotiate land acquisition,

declare war with one another, but their actions are restricted to the game's parameters. Within the team pair of course, the interactions are unlimited and potentially challenge the psychosocial level of comfort of the players. Nevertheless, because the game provides a focus, partners can retreat, or be redirected by the teacher, to the context of the game.

Strategic level games in a multiplayer format remove students from the need for direct interpersonal negotiation (it should be noted that this observation may not apply to games where an avatar represents a player.) The computer network limits interpersonal negotiation opportunities thereby reducing the dynamics of a live relationship. Interaction is confined to text over a chat function or the moves of the game. This potentially eliminates body language, eye contact and distractions from bystanders. This makes interpersonal negotiation simpler, but it also tempts lower functioning in some cases. In addition, the local area network game limits the promotion of Social Perspective Coordination to the confines of the game system. Unlike *Diplomacy* where the focus of the game becomes playing the interaction of relationships to win the game, a multiplayer LAN game's focus lies in playing the game to win. Potential interaction with others exists, but this interaction is not always necessary to play or to win. A strategic multiplayer LAN game is more suited to most middle-school students' developmental levels. The job of the teacher remains to promote growth and help apply the affective lessons of the game to other contexts.

Outcomes and Discussion

The game tools and dynamics provided opportunities for advancement of negotiation strategies and social perspective coordination.

Interpersonal negotiation can take place directly between students in real time, or they can communicate via the game's chat system, but their

negotiations are tempered both by a more complex set of game rules and by the fact that they are focused on their own computer (although they work in pairs at a computer for some sessions). As with instant messaging and email, this allows students to communicate in a less direct, anonymous fashion. As a result, in certain cases more passive students become more active in their interpersonal negotiations and vice versa. Because of the parameters of the game, the challenge of creating a comfortable environment is lessened somewhat relative to playing *Diplomacy*; however, the teacher must deal with additional experimentation in communications that result from anonymity.

Below is an example of discourse in a chat window in the game between two students:

"You're stupid."

"Shut up."

"What is your problem? Why are you always so stupid?"

At this point the second student turns away from his computer.

"You're stupid!" the second student announces across the room.

The teacher then intervenes by reminding the students that they are to play a game.

Although a tame example of student interaction through the chat system, this interchange provides a window into the relatively low level functioning the anonymity of chatting can create. The intervention ends negotiation at a Differentiated level [Level 1 from Table 1] with no attempt to move the interaction higher.

Later in the debrief session, the teacher asks about the incident:

Student 1: *"I was joking!"*

Teacher: *"Would you joke like that in person?"*

Student 1: “*What do you mean? Like would I tell Jake that he’s stupid? Probably, but just as a joke.*”

Teacher: “*Do you think it makes a difference whether you tell him in person or via chat?*”

Student 1: “*Not really.*”

Teacher: “*Do you mind telling us if there was a difference, [student 2]?*”

Student 2: “*There wasn’t really a difference ‘cause like I knew he was joking but it was still kind of distracting.*”

Teacher: “*Which—when he chatted with you or.*”

Student 2: “*I couldn’t play the game because he was distracting me.*”

Teacher: “*So does what happened in the game happen in class too?*”

Here the teacher begins to shift thinking to other contexts. “...But just as a joke” reveals that there is an understanding that lower levels of negotiation are not acceptable” Rather than guide the negotiation to higher levels, the teacher uses reflection to promote Awareness of Personal Meaning to Need-Based Personal [Level 3 from Table 2] with an orientation toward relationships. The teacher also moved this awareness across contexts pushing awareness toward more Integration and Insight [Level 5 from Table 2]. Interestingly, the students initially do not identify any difference between typing ‘you’re stupid’ and saying it in person. No set of ethical principles exists to frame the behavior in different contexts. But later in the conversation, this exchange occurs.

Student 2: “*I know you’re joking when you are in person, but the message made me angry.*”

Teacher: “*Why do you think it is easier to know he’s joking when he’s in person?*”

Student 2: “*I don’t know...*”

There is the beginning of awareness that communication is different in person than it is over the network. The teacher then seizes this dawning realization to steer the debriefing session to explore

how communication can change depending on the context. Personal Meaning Awareness grows toward more Integrated and Insightful levels (see Table 2) as a result of the teacher’s efforts to move the reflection across contexts. This growing awareness prompts the discovery that similar behavior produces similar results across contexts. A set of ethical principles rests on this discovery.

There was a high level of engagement in the activity.

Of course the holy grail of any teacher, particularly at the middle school level, is to engage learners more deeply and more consistently in the activity. In *Diplomacy*, some students tend to withdraw, an Undifferentiated [Level 0 from Table 1] negotiation strategy, especially from interactions with their peers, but in *Civilization IV: Colonization*, nearly every student continues to play with varying degrees of focus on the game. While some are focused on the goal of winning, others use the chat system for more personal conversations while the game runs in the background. Although they are playing the game, the primary focus for some becomes a personal conversation via chat. Interestingly this difference in focus is very gender specific. The boys tended to send short messages about the game whereas the girls more likely send messages about clothing, celebrities, or social life. We could speculate that the Personal Meaning of girls is more Integrated and Insightful because they are able to bring their Social Awareness to the gaming context. On the other hand, they may simply be multi-tasking and view game interaction and social interaction as discrete. Despite the social nature of the girls’ chat session, they knew the dynamics of the game and appeared equally invested in winning, but perhaps for different motives.

Jill (while making her moves during the game, she types): “*Who’s coming this afternoon?*”

Anne (looking up from her computer and over at Jill, then types): *“Aren’t you? What would look good with the scarf Jane made? Would John look good in it?”*

Both girls turn from their computers to look at John and they giggle. John notices and smiles self-consciously but keeps his eyes on the computer.

Jill (speaking across the room): *“Let’s declare war on John.”*

John: *“What did I do?”*

The girls giggle and make their moves.

John: *“Hey! You’re attacking my city!” He smiles and makes his moves, which destroy the girls’ attack.*

Later in the debriefing session the teacher asks, “what made you girls decide to attack John?”

Jill: *“I dunno.”*

Anne: *“Yes you do...”*

Teacher: *“Ok. How did the fact that you could have a chat session about your upcoming fashion show change your feelings about playing the game?”*

Previously, the girls had not known about the chat feature and had not really enjoyed the game. They had also not been able to follow the rules until a third student, Melissa, had shown them during recess.

Anne: *“Well we could talk about stuff while we were playing. It made it more fun.”*

Teacher: *“What was fun? The game or the chatting?”*

Anne: *“The Chatting.”*

Teacher: *“So what distracted you from the chat session back to the game?”*

Jill: *“John was all proud of winning and so we attacked him for fun.”*

The teacher in this instance is crafting a conversation that skirts the issue of flirtation, but

still attempts to get the students to explore their motivations, or self-awareness, and how these motivations affect their actions across contexts. In a sense, the game has allowed an interaction between the girls and John that might not have occurred in reality. The potential flirtation drives down the level of Interpersonal Negotiation and challenges the ability of students to use a set of ethical principles across contexts. The teacher might explore in further conversation why the girls chose to attack John rather than become his ally, although this conversation would be fraught with the perils of exploring flirting. This approach, nevertheless, might build Personal Meaning Awareness around the incident.

The social aspect of the game play providing equally fruitful opportunities for student growth.

Since moral and ethical development, by definition, involves interpersonal behavior, the social nature of the game play is certainly critical. However, the ‘safe conflict’ nature of the game play provides a unique opportunity not often otherwise generated in the classroom. One specific situation involved a student, Robert, who continued to be very aggressive while playing on his own against several others who were both in teams and working as individuals. As other students realized Robert’s attitude, they began to take action that followed a progression of techniques. Initially, they tried to work within the game to limit his aggression. Tools here were limited to military operations against Robert [Differentiated and Subjective strategies]. When these did not work, some of his opponents suggested a treaty or an alliance on the chat system [Reciprocal and Self-Reflective strategies]. These strategies were refereed by the game system.

At the same time there began a conversation with Robert in the room: “What are you doing? Why do you keep attacking us? Hey, that isn’t fair.” Robert’s response was, “I’m just playing the game.”

Students appealed to him outside the game system to work more cooperatively at the game and to let others have a chance to succeed as well, especially given that several teams could meet the victory conditions. Curiously, Robert was unable to pull himself from a very Rule-Based, Personal awareness of the game. Ultimately, during a reflection period, the class decided to restart this game as well, although Robert did not appear to understand all the reasoning. Did the parameters of the game system inhibit the development of Personal Meaning Awareness for Robert and consequently his ability to apply a set of ethical principles across contexts?

In summary, this preliminary use of *Civilization IV: Colonization* has demonstrated similar outcomes as the use of *Diplomacy*, with an increased level of engagement by students.

CONCLUSION

Through our case studies, we have provided a narrow yet rich slice of classroom dynamics, which demonstrate the potential of digital gaming for assisting in the development of ethical behavior. In these classrooms, students challenged and pushed their ability to see another's perspective, to cultivate and negotiate improved peer relationships, and to heighten their awareness of personal behavior in interpersonal relations, all through motivated engagement in a digital medium that is akin to activities they are doing outside of school. For the teacher, it opens up opportunities for coaching and facilitation of such critical skills in a student-centered environment, allowing for more robust dialogue and collaboration between the students and her. While there are of course more options for games than just *Civilization* and *Diplomacy*, only certain games will create the environment and dynamics that set the stage for this work. These games produce dynamics where one player's actions affect another, and the dialogue and collaboration that ensues in the

classroom during game play help expose thinking and perspective of peers. Thus certain digital games, when properly facilitated in the classroom, can be powerful catalysts for students developing the critical components that congeal to form an operating system for ethical behavior.

A significant challenge in playing a game in the classroom is that it reaches across social environments. Robert, the student described previously who had a difficult time acclimating to the situation, could operate in the game at low levels and aggressively advance his colony. At the same time he had difficulty integrating his understanding of the strategies to win the game with real life strategies in being a kind and ethical member of the classroom. Creating and facilitating these connections for students is a key piece to developing ethical systems through game play. Further teacher intervention in the game Robert was playing might have revolved around how Robert could have succeeded better at the game with more cooperative strategies. Consideration of the real classroom dynamic might become the ultimate goal. At the root of the classroom gaming experience lies the necessity of resolving conflicts and building shared experiences so that students are more facile in coordinating social perspectives and integrating this understanding within their systems of personal meaning. In this sense, they build a system of ethical principles that are more robust and transfer more consistently across contexts.

In debriefing both games, a useful tool became the ability of the teacher to move student focus from the dynamics of game play to the context of history. Because games involve winning and losing, the emotion of the class can run high. By intervening with historical perspective, such emotional tension can be diffused. The teacher provides the third person, mutual perspective (see Table 1), provided by an historical perspective that allows everyone to step beyond the self. In one case, a student had been nearly eliminated early in a game. Of course, he was not happy,

and during the debrief many students consoled him while others explained it was only a game: Rule- or Need-Based Personal and Rule-Based Impersonal Awareness responses respectively. What seemed to improve the situation further was a discussion of historical colonization and what happened when French control of North America was virtually eliminated by the English. In this sense, the role of the teacher was to bring the perspective of the students to a broader, more “Mutual,” “Societal” perspective. On reflection, the students also decided to restart the game and not gang up on the other student.

Recommendations Summary for Optimal Classroom Dynamics:

1. **Emotional and Physical Safety:** Before playing any game, create a safe environment that values both the individual and the group
2. **Creating Teams:** Consider how best to create teams based on student personality and skills— for example, pair quiet students with more outgoing students.
3. **Reflection:** Build in time and tools for reflection on the gaming process
4. **Teacher Intervention during game play:** The goal is not always for students to function at the highest level for any given component but to have achieved an understanding that lets him act in ways that are best suited to the situation.
5. **Game as classroom manager:** Use the game to provide the structure for interaction and facilitate both action and reflection. ROSS

Cultivating moral development can be considerably more challenging than attempting to develop conceptual understanding in a discipline area with students. Employing games to do so can offer a vehicle to help educators explore and discuss the methodology and pedagogy for accessing moral development in the classroom.

The key to success with all games and simulations lies in the teacher’s ability to become comfortable in the role of a facilitator. At Shady Hill, students already have years of student-led, teacher-facilitated learning experiences by the time they reach the middle school years, and they are used to reflecting on their academic and social development. These are significant advantages in using and reflecting on games and simulations in a classroom. Yet learning environments that are less strong in these areas should not be discouraged from using digital games for moral development. Rather, they should seek to identify the differences and likely challenges as a result of the variance in the contexts and apply the frameworks and approaches described in this case study where they align with your learning environment. In seeking to develop in students the central components that ultimately lead to ethical behavior, understanding the taxonomies and frameworks presented by Selman and others serves as a powerful tool for the educator. Eventually one can become well-versed in identifying the level or stage of development a student is at in each of the components based on their comments and work in the classroom. In turn, this assessment ultimately can help them strategically guide each student toward advancement in their own personal development.

Further work would include a broader scope in case studies—in terms of games used, age of students, varying learning environments, etc. It is our hope that more practitioners will engage in action research (research conducting in real-time by the practicing professional), which produces analyses of games for moral development in varying contexts. Assessing the impact of these pedagogies on student development is one critical need area: this might include developing assessments that focus on the experience of a student within a program that targets developing social perspective coordination across contexts. Subsequently, this could then broaden to explore the way in which a student understands how a situation informs his choice of what level at which to function. In

essence, seeking to understand how the meaning she makes of a situation creates her thinking and acting around that situation. Finally, assessment and evaluation would need to connect how students develop in a gaming situation to how they bring this development to real world situations. Our observations suggest that these next steps are worth exploring. The very students we have worked with have demonstrated that digital games provide a structure in which to explore the socially interactive foundations of developing ethical men and women.

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