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# MEASURING TEAM COLLABORATION IN THE MARSHALL UNIVERSITY SUMMER ENRICHMENT PROGRAM

A thesis submitted to the Graduate College of Marshall University

In partial fulfillment of the requirements for the degree of Education Specialist

in

# School Psychology

by Marian Pyles

Sandra S. Stroebel Ph.D. Committee Chair Stephen L. O'Keefe Ph.D. Fred Jay Krieg Ph.D.

> Marshall University August 2012

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#### Abstract

The present study investigates measures of team collaboration among graduate students participating in the Marshall University Graduate College Summer Enrichment Program. The purpose of the study was to use an independent criterion, rankings by an expert panel, as a way to determine the better measure of collaboration: Thermometers or the Collaboration Survey. A Spearman's rho correlation showed correlations between the Thermometer Team question, the Collaboration Survey, and the expert rankings, whereas a binary logistic regression showed that only the Thermometers predicted whether a team would be ranked as high or low. Results indicate that the MUGC Summer Enrichment Program should use Thermometers as a measure of collaboration.

#### Chapter I

#### **Review of Literature**

#### **Collaboration and Teaming in Schools**

It seems that in today's school systems, the words "teamwork" and "collaboration" are heard daily. Although they are easy to say, it is less clear what they actually mean. Teachers are told to work together in grade-level teams or by department. With regards to special education, specialists from school psychologists to different kinds of therapists are told to collaborate with one another along with teachers in order to find the best possible placement and to make the best decisions for a student (Lam, 2005). Although colleges stress the importance of teamwork in classes pertaining to special education and civil rights laws, the actual time spent on teaching how to collaborate on these issues can vary depending on one's field of study. (Shaw & Madaus, 2008). College students tend to be taught in individual programs of thought, based on whatever profession they chose. Although this could be of benefit to members working together within a particular program, it could become problematic when students from different programs are asked to work together.

It is difficult to find research on what constitutes the definition of "team" for various programs; however, it would be extremely helpful for graduate students from different professions to take a multidisciplinary course so that they could be in agreement on how to collaborate (Lam, 2005). There is literature in the healthcare field stating how members of different specialties can have trouble communicating with other disciplines. Different professionals in their programs get stuck in their own terminology & ways of thinking, making teamwork challenging (Hall and Weaver, 2001). School personnel from different disciplines often do not know much about other professionals' job responsibilities. In fact, many educators

are not trained or equipped to work on teams; they must learn to work together (Flowers, Mertens, & Mulhall, 2000). Although members of a school system may be inclined to cooperate, they may not know how to collaborate, especially across disciplines (Lam, 2005). Primary and secondary students' needs require input from many different specialists; therefore increasing the need for better collaboration among professionals. Strong collaboration with each other can enhance collaboration with those outside the school, like parents (Lam, 2005).

There are certain commonalities needed for a team to collaborate effectively. The following literature review will discuss the most commonly found elements of an effective team. Both teams and the concept of collaboration will be defined. Also, factors that help and hinder collaboration will be discussed along with the importance and benefit of a solid team in the school systems.

#### **Teams: Definition and Function**

A strong team structure leads to less confusion for any outsider needing to share and get information. For example, parents may receive better communication from school professionals when they are all clearly speaking in the same terms and sharing the same background in collaboration (Lam, 2005). In his PowerPoint titled Team Building, Dr. Krieg (n.d.), professor of School Psychology at Marshall University, defines a team as "a small number of people with complementary skills who are equally committed to a common purpose, goals, and approach for which they hold themselves mutually accountable." This definition fits well with five key traits of members of a good team listed by Gostick and Elton (2010): goal setting, communication, trust, accountability, and recognition. The first trait of an effective team is goal setting, which includes knowing where one is going. Team members with good goal setting frequently set goals that not only align with personal competencies but also align with the goal of the team. They make sure the goal is realistic. A member needs to feel that he or she can reach a goal so that it has personal value while also keeping in mind what reaching the goal means for the team. Communication is critical for the realization of goals (Gostick & Elton, 2010).

The second trait of an effective team is good communication. Communication involves sharing ideas freely, passing on ideas with team members, identifying problems while simultaneously thinking of potential solutions, and really taking the time to listen. Listening is just as important as sharing and can help with trust as well as overall group morale. The traits of a good team are not mutually exclusive; listening to others and really taking in what they say can also help in team goal setting (Gostick & Elton, 2010).

The remaining traits of an effective team are trust, accountability, and recognition. Team members must trust one another. Distrust can ruin a team; it can lead people to revert back to individual goals and inhibit the sharing of good ideas. Additionally, team members must demonstrate accountability by recognizing their own roles and responsibilities as well as how those roles and responsibilities relate to other members. Team members should demonstrate recognition by cheering for and encouraging each other while avoiding any type of negative comments. This type of support can increase morale and lend itself to team members sticking with the task (Gostick & Elton, 2010). By practicing the five traits of an effective team, members demonstrate shared leadership, which is an important quality in collaboration.

# **Collaboration: Definitions and Key Elements**

Collaboration can be defined as at least two coequal individuals working toward a common goal by voluntarily interacting in shared decision-making through direct interaction (Kennedy & Stewart, 2011). Direct interaction among members includes keeping each other informed, discussing any problems and learning from others. In schools, teachers are encouraged to collaborate with each other in order to form professional learning communities where they share a common goal and work together frequently in teams (Leonard & Leonard, 2003). Four important factors in collaboration are interactional determinants, interpersonal factors, organizational determinants, and systematic determinants (Kennedy & Stewart, 2011).

Interactional determinants include motivation among group members and past experiences with collaboration. Group members need to be motivated to work together in order for the group to function effectively; past experiences can influence the motivation levels of group members. Someone with a good experience may feel more compelled to work in a group than someone who had a poor experience in the past. Interpersonal factors include how an individual feels about the group or goal. An individual's style of practice, competence including effective communication, mutual respect for other group members, and appreciation for others' roles—all make up interpersonal factors (Kennedy & Stewart, 2011). The individuals who comprise a group are important in its ultimate effectiveness as members need to be competent in their respective roles and feel that their teammates are equally competent.

In school systems, it is important that each member of a group demonstrates these factors. Although it is not guaranteed that each member will have had a positive experience with collaboration in the past, it is possible to have highly motivated group members regardless. A

highly motivated person is likely to look past bad experiences when he or she knows there is a big reward to be gained if the person can help in a current situation (Gostick & Elton, 2010). This is why interpersonal factors are important; a group needs to be made up of people who will be motivated to reach the goal and who can get along with other group members.

Even if a group member is motivated to work with others and demonstrates all of the critical interpersonal factors, there still needs to be organizational and systematic support for collaboration to be most effective. The philosophy and structure of an organization need to be conducive to collaboration. There must be time to meet and plan and with support from the organizational leaders. Systematic determinants such as training, traditions, interests, values, and roles of a group are also critical in successful collaboration (Kennedy & Stewart, 2011).

Collaboration in the school systems is often discussed in terms of teachers working together, perhaps in a co-teaching environment or even in professional learning communities where they share goals and plans for teaching certain curricula (Leonard & Leonard, 2003). Broader types of collaboration include an entire array of professionals, not just teachers, all working as a team to reach a common goal like increasing academic achievement for target students or developing Individualized Education Programs (IEPs) (Jolivette, Barton-Arwood, & Scott, 2000). Collaboration is different from cooperation in that it involves contributions from all team members rather than just agreeing to do what one person or leader suggests (Gostick & Elton, 2010). Group members should share ideas equally. Wu, Tsui, & Kinicki (2010) examined the elements of group leadership and found that group leadership led to more positive group outcomes than did leadership focusing on relationships with individuals. In other words, a team should be more powerful than the people of which it is comprised.

#### **Collaboration in Schools**

It has been noted that collaborative work among teachers can increase staff morale, trust, and openness (Johnson, 2003). Collaboration is aided when schools have regularly scheduled meetings for teams to share ideas, areas of expertise, and to make ongoing revisions to a plan. Having a sense of being held accountable to one's group and maintaining a feeling of support in reaching a goal have also shown to be helpful (Hunt, Soto, Maier, & Doering, 2003). A common goal is frequently considered the best place to start when beginning to collaborate as a team (Nijhuis, Reinders-Messelink, Blecourt, Olijve, Groothoff, Nakken, & Postema, 2007). Frequent sharing of ideas, being held accountable for a given role, and being flexible in altering the path to the long-range goal are all considered key factors determining success among teachers and other personnel put into teams (Hunt, Soto, Maier, Muller, & Goetz, 2002).

Although collaboration is beneficial to schools, it is not always easy to achieve, especially for people who are based outside a school trying to collaborate with those working within a school. In a study to look at benefits and barriers to collaborating with teachers and other school personnel, Bradley-Klug, Sundman, Nadeau, Cunningham, and Ogg (2010) defined collaboration as using ongoing, bidirectional problem-solving efforts. As students constantly grow and change, their service providers must also constantly be monitoring, adapting, and communicating with each other. A survey measuring several concepts, including perceived barriers and benefits to collaboration with schools, was given to 570 pediatricians. The most commonly cited obstacles were limited time, little access to school personnel, lack of reimbursement for collaboration, not knowing with whom to collaborate, and differing views pertaining to child development. Based on the surveys, there seemed to be a lot of uncertainty

about how to collaborate. In fact, multiple respondents even cited a lack in training as an obstacle to collaboration (Bradley-Klug, et. al., 2010).

Pediatricians are not the only ones who may feel at a loss when collaborating with school systems. One study found that caseworkers for foster children have little trust for teachers, and vice versa (Altshuler, 2003). Caseworkers blamed educators for not wanting to invest the time in students, knowing that they could potentially be moving in a few months. On the other hand, teachers thought caseworkers had no idea what was going on and felt that they seldom ever checked on students. This study highlighted the doubts between the two groups of professionals. This is an obvious barrier to collaboration—mutual distrust.

## **Importance of Teaming and Collaboration**

The above literature discusses important elements to collaboration and teamwork but not necessarily why they are so critical for professionals working in the field of education. There are two laws that govern many things that happen in school systems and require professionals to work collaboratively: The Individuals with Disabilities Education Improvement Act of 2004 and the Americans with Disabilities Act (ADA). The ADA requires professionals within a school system to collaborate with each other and people from outside agencies in order to prohibit discrimination against people with disabilities. IDEA requires multidisciplinary teams in the development of Individualized Education Plans (U.S. Department of Education, 2006). Schools themselves have teams for a variety of reasons, mainly to support students. According to the West Virginia State Board of Education's Policy 2419 (2012), teams are often used to help students at risk of failing or in need of support. School systems largely depend on teams of professionals like teachers, school psychologists, counselors, and specialists in order to get the

best outcome for each student. In order to prepare graduate students for working in the school systems, it is critical that the Summer Practicum includes an emphasis on team building.

Ideological reasons for having a team include the fact that teams can accomplish change in an organization (Gostick & Elton, 2010). According to Dr, Krieg's (n.d) PowerPoint on Team Building, there are five key lessons to keep in mind when it comes to accomplishing change. The first is that there needs to be a shared vision of a desired outcome. Each member of the team needs to be aware of the vision and be on board with making that vision a reality. The second lesson is that teams need collaboration rather than cooperation, as collaboration involves two equal parties engaging in decision making. The third lesson acknowledges that, although team members should be willing to change whatever is needed along the way, the long-range goal, or extraordinary goal, should not be altered. Self-evaluation and altering plans along the way are necessary to adjust to what is and what is not working; however, the big picture should not be changed. The next lesson is that change can't be forced; it must be supported by everyone involved. Mandated change does not work because it is not necessarily supportive. Change is not something that simply happens; it is a process supported by all team members. While working to reach the shared vision, team members will develop a sense of ownership and motivation. The final lesson is that attitudinal change precedes programmatic change (Krieg, n.d.). So, everyone needs to be on board mentally before any effective change will actually happen.

#### Marshall University Summer Enrichment Program

The Marshall University Summer Enrichment Program is a six-week intensive program designed to allow graduate students to receive and practice appropriate multidisciplinary teaming. Teams at the summer program are comprised of graduate students seeking certification or licensure in special education, school counseling, school psychology, or reading. School psychology students are expected to provide a full range of school psychological services while collaborating with other professionals in a school setting. Students are closely supervised by School Psychology program faculty. The program is the final practicum before school psychology students begin their internship year (Krieg, Meikamp, O'Keefe, & Stroebel, 2006).

In past years, members of the MU Summer Enrichment program were given weekly rating scales to rate their experience. These anchored rating scales, called Thermometers, were an attempt to measure team cohesiveness among graduate students participating in the teams. A study done by Conaway in 2011 attempted to determine whether or not the Thermometers actually were rating team cohesiveness or some other factor. In order to determine this, Conaway developed a new instrument, an Expert Rating Scale, which was developed in collaboration with an expert on teaming who trained the graduate students in the summer program. Conaway compared item by item correlations from his Expert Rating Scale with each other as well as with the two questions from the thermometer rating scale. He found that the thermometer rating scale questions did not correlate with questions from the Expert Rating Scale. Although the Expert Rating Scale had face validity, it was determined that an independent measure of collaboration was needed to determine whether the Thermometers or the Expert Rating Scales was better at measuring cohesiveness and teaming. Among his own questions on the Expert Rating Scale, Conaway found only five that correlated highly with each other and that were thought to be the best measure of collaboration. He recommended future research would compare the five questions from the original Expert Rating Scale and the thermometer with an independent measure of collaboration. This study will do this research by using rankings done by a panel of experts as an additional measure of team cohesiveness. This study will attempt to determine whether the Thermometer or the questions from the Expert Rating Scale is the better measure of team collaboration and which should be used in the future.

#### **Chapter II**

#### Method

## Subjects:

Participants included all 66 graduate students in the Marshall University Summer Enrichment Program. Participants were seeking certification in school psychology, special education, literacy, or school counseling. Prior to beginning the program, graduate students were divided into seven teams. The idea was to simulate grade-level teams and to prepare participants for their work as interns during the following year. By having a team, graduate students were able to experience working with professionals from outside their own fields.

#### **Instruments:**

Each week, graduate students of the MU Summer Enrichment Program were given a weekly anonymous survey. This survey, called a Thermometer, consisted of two questions designed to measure team cohesiveness. The two questions were as follows: 1) How have you done this week? 2) How has your team done this week? Each question could be answered by circling 1-10, with one being poor and 10 being excellent.

During the last day of the program, participants were also asked to fill out a brief, fivequestion rating scale measuring collaboration. Titled the Collaboration Survey, it consisted of the five questions that correlated to each other and were believed to assess collaboration from Conaway's (2011) study. The five measures were designed to reflect the critical team components of structure, communication, trust, function, and recognition respectively. The questions were as follows: 1) Has this experience given you a better understanding of how grade level teams work together toward a common goal? 2) Did your team collaborate with each other and progress through the 4 stages of group development with success? 3) Do you feel you had the best experience possible working in a collaborative model? 4) Did the summer program foster an environment for team collaboration, and did it help you to better understand how a team functions within a school setting? 5) Within your team do you feel all the needs of the students were met and that each member of the team used all of his or her individual talents appropriately?

According to Conaway (2011), these questions have face validity because the survey was partially developed by the expert who did the training of teams. The questions are consistent with the training received by each team member and should reflect how they have been taught to collaborate in a team setting. Participants rated their answers on a Likert-type scale from 1-7 with 1 indicating strong disagreement and 7 indicating strong agreement. To discourage participants from reporting indifferent feelings, a score of 4, which would normally indicate neutral, was taken out of the optional scores to circle.

# **Procedure:**

Each week, participants were asked to fill out a Thermometer rating scale to assess individual and team performance. On the last day of the program during the final week, participants had the Collaboration Survey attached to their Thermometer rating scales and were asked to fill out both. All surveys were anonymous with participants only recording the number of their group for the researcher's identification purposes. Seven Thermometers and one Collaboration Survey were collected per individual over the course of the program. In addition to the Thermometers and Collaboration Surveys, a panel of experts also rated the teams on their team cohesiveness and collaboration. The panel of experts included members from several different graduate departments, including a supervisor from the School Psychology department, a supervisor of the Literacy department, and, the psychologist who had presented on effective teaming as an independent rater. The experts put the seven teams in one of three categories: teams that worked well together (considered top teams); teams that had mediocre outcomes for the learners (considered middle teams); and teams that did not collaborate (considered bottom teams).

### **Chapter III**

#### Results

The Thermometers from the final week, the Collaboration Surveys, and the rankings from the expert raters were all compared using a binary logistic regression as well as a Spearman's rho correlation.

For the logistic regression, only teams ranked as high or low were put into the equation. It was necessary to remove the middle ranking teams from the binary logistic regression due to the nature of the regression requiring only two predictor outcomes (high or low). A binary logistic regression showed a moderate to strong relationship between the Collaboration Survey and the Thermometer Team question of how has your team done this week being able to predict the Expert Rating of the teams. The overall percentage correct for the prediction was 77.1. This is shown in Table 1. When the two independent variables were examined separately, it was shown that the Thermometer Team question was the significant predictor in the regression. The Collaboration Survey did not add a significant prediction to the equation. These findings are shown in Table 2.

#### Table 1

#### **Classification Table**

|        |                    |      | Predicted |        |                    |  |
|--------|--------------------|------|-----------|--------|--------------------|--|
|        |                    |      |           | Rating |                    |  |
|        | Observed           |      | 1.00      | 3.00   | Percentage Correct |  |
| Step 1 | Expert Rating      | 1.00 | 10        | 6      | 62.5               |  |
|        |                    | 3.00 | 2         | 17     | 89.5               |  |
|        | Overall Percentage |      |           |        | 77.1               |  |

## Table 2

#### Variables in the Equation

|        |                      | В       | S.E.  | Wald  | df | Sig. | Exp(B) |
|--------|----------------------|---------|-------|-------|----|------|--------|
| Step 1 | Thermometer TEAM     | 1.990   | .922  | 4.658 | 1  | .031 | 7.312  |
|        | Collaboration Survey | .135    | .106  | 1.611 | 1  | .204 | 1.144  |
|        | Constant             | -22.852 | 9.343 | 5.982 | 1  | .014 | .000   |

Variable(s) entered on step 1: Thermometer TEAM, Collaboration Survey

a. The cut value is .500

The Spearman's rho correlation showed significant correlations between the

Thermometer question addressing how well one's team did and how well an individual did. It

also showed that the Thermometer team question correlated significantly with the Collaboration Survey and the Expert Rating Scale. An intercorrelation matrix for all variables is shown in Table 3.

#### Table 3

#### Correlations

|                |                      |                         | Thermometer | Thermometer | Collaboration | Expert |
|----------------|----------------------|-------------------------|-------------|-------------|---------------|--------|
|                |                      |                         | YOU         | TEAM        | Survey        | Rating |
|                | -                    | Correlation Coefficient | 1.000       | .581**      | .246          | .240   |
|                | Thermometer YOU      | Sig. (2-tailed)         |             | .000        | .054          | .061   |
|                |                      | Ν                       | 62          | 62          | 62            | 62     |
|                | Thermometer TEAM     | Correlation Coefficient | .581**      | 1.000       | .434**        | .419** |
|                |                      | Sig. (2-tailed)         | .000        |             | .000          | .001   |
|                |                      | Ν                       | 62          | 62          | 62            | 62     |
| Spearman's rho | Collaboration Survey | Correlation Coefficient | .246        | .434**      | 1.000         | .338** |
|                |                      | Sig. (2-tailed)         | .054        | .000        |               | .007   |
|                |                      | Ν                       | 62          | 62          | 62            | 62     |
|                | Expert Rating        | Correlation Coefficient | .240        | .419**      | .338**        | 1.000  |
|                |                      | Sig. (2-tailed)         | .061        | .001        | .007          |        |
|                |                      | Ν                       | 62          | 62          | 62            | 62     |

\*\*. Correlation is significant at the 0.01 level (2-tailed).

#### **Chapter IV**

#### Discussion

The purpose of this study was to determine whether the Thermometer or the Collaboration Survey was a better measure of team cohesion and collaboration. As discussed in the literature review, team cohesion is a critical component of an effective team. The participants in the study were all graduate students participating in the Marshall University Summer Enrichment Program. Students in the program were divided into teams and were all seeking licensure in either special education, reading, school counseling, or school psychology. Because this is the final practicum before school psychology students begin their internship year, it is very important for graduate students of the program to be able to evaluate whether or not they were working in a cohesive team.

In past years, graduate students participating in the practicum were always asked to fill out the Thermometer scales. These scales were filled out weekly and had two questions: one addressing how well the individual did and the other addressing how well the team performed. Faculty members from the School Psychology department questioned whether the Thermometers were an effective measure of team cohesion; there was concern that they were too simplistic.

In response to this concern, graduate student Jason Conaway did a program evaluation for his thesis requirement in 2011. In his study, he compared the Thermometer to a new "Expert Rating Scale." Conaway's study suggested that the Thermometers did not measure collaboration because they did not correlate with items from the Expert Rating Scale. In addition to not correlating with the Thermometers, only five questions from the Expert Rating Scale correlated with each other. Conaway suggested that these five questions be used in the future in order to compare with the Thermometers and an independent criterion of collaboration.

The current study did compare these five questions, which were named Collaboration Survey, to the thermometer and the expert ratings of the group. The Spearman's rho correlation showed that the Collaboration Survey is related to team cohesiveness; however, the logistic regression showed that the Collaboration Survey did not add anything once the thermometer was placed into the equation. Hence, the better measure is actually the Thermometer question dealing with how well one's team functions. Only the Team Thermometer question correlated with the Collaboration Survey and expert rankings; the Individual Thermometer question did not. Therefore, how the individuals in the study felt they performed correlated with how well they felt their teams performed; however, one's perception of his or her individual performance did not show any significant correlation with the other two measures of collaboration. These results would simply suggest that a future study trying to measure collaboration among team members may not need the Thermometer question about an individual's own performance. However, the question still adds value to this study as it demonstrates a connection in one's self-reflection relative to the perception of his or her team's performance.

Based on the Spearman's rho correlation and the binary logistic regression, the Marshall University Summer Enrichment Program should continue to use the Thermometer question dealing with teams as an effective way to evaluate team cohesiveness. Frequent interaction with team members and having time to reflect on how well a team is doing is important to the success of collaboration among a team (Lam, 2005). By having participants of the MU Summer Enrichment program reflect weekly on their team's success, participants can address any problems as they arise and therefore improve their own efforts in collaboration.

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Research has shown that having the time to reflect is a key part of successful collaboration (Hunt, Soto, Maier, & Doering, 2003). Direct participant feedback is a common method of determining strengths of groups. The literature review for this study focused primarily on factors that proved to be effective in collaboration based on the opinions and surveys from the participants. Other research takes a less subjective approach by attempting to measure collaboration and team cohesiveness using validated measures. One such study found important components of a measuring tool for collaboration to include questions that addressed reflection of the teaming process, flexibility and newly created activities by professionals, collective ownership of goals, and role interdependence (Melin, Bronstein, Anderson-Butcher, Amrose, Ball, & Green, 2010). This tool is obviously more in depth than the Thermometers used at the MU Summer Enrichment Program. That being said, the Thermometers still proved to be the better predictor of collaboration in the present study when compared to the more detailed Collaboration Survey.

There are several reasons why the Thermometer may be a better measure of collaboration than the Collaboration Survey. First, the participants were used to filling out a Thermometer each week for the duration of the program. The two questions on the Thermometer stayed the same each week, therefore, allowing participants to judge their answers not only on their performance from the last week, but also relative to where they began. People grow over time, so truly reflective participants may have felt more comfortable rating themselves and their teams keeping in mind what they had given as a rating in prior weeks. A good performance in the first week may not be as strong as a good performance in the last week; however, knowing that you rated your team highly in the first week would certainly make one appreciate the value of a good team in the last week. In contrast, the Collaboration Survey was only given during the

final week. There were no prior weeks for the participants to keep in mind when answering the questions. Perhaps results would have been different if participants had been given the Collaboration Survey each week. Those who rated their teams more or less favorably perhaps would have felt differently if they had been doing the survey all along.

Second, the Thermometer may be a better measure of collaboration than the Collaboration Survey due to the simplicity of the questions on the Thermometer. Whereas the Collaboration Survey goes into specific topics like team environments, goals, group development, talents, and an understanding of functions of teams within a school environment, the Thermometer sticks to the simple notion of how well a team performed in a given week. Assuming that members have been trained on the components of an effective team, the simplicity of the Thermometers allows the participants to go with their instinctive feeling about their team, rather than analyze each component and whether their teams performed well or not on these.

Third, another factor to consider is the ratings by the panel of experts as a measure of team cohesiveness. It is a well-supported theory that the stages of group development follow a model by Bruce Tuckman (1965): forming, storming, norming, and performing. To put it briefly, groups go through four phases. In the beginning, they get to know each other—forming. Next comes a phase where conflict arises; as members become more comfortable with each other, they engage in storming. After experiencing conflict, group members work through it and begin to find their roles in relation to the group—norming. Last comes performing—when the group is finally functioning as a team and using positive measures to solve conflict (Patnode, 2003). One study suggests that, in activities that involve little social interaction, cohesiveness does not predict team performance, but rather, team performance predicts cohesiveness (Fullagar &

Egleston, 2008). The teams at the MU Summer Enrichment Program certainly had a lot of interaction within their groups. Still, it would be interesting if in the future, instead of using an expert panel of raters, a study could be done strictly using performance of teams (i.e., success of students) to see if it could be predicted by the Collaboration Survey or the Thermometers. Using team performance would take out any subjectivity on the parts of the raters. A measurement tool would have to be developed to assess students at the beginning of the program and then again at the end. Growth and success would need to be based off more than simply learning; it would need to encompass many aspects of the children's development and attempt to take into account outside factors.

Something that should be noted is that the expert raters had different views of good teams. One had the view that the absence of conflict was a successful team, whereas the others thought positive resolution of problems was a good team. Despite these differences in the definition, the raters still agreed on the same teams for the best and worst teams. Just as it is important for students to be in agreement on definitions, it is also important for the validity of this study that the raters were in agreement as to what constitutes a good team.

Other options for future research would be to repeat the study using weighted scores on the Collaboration Survey. The Collaboration Survey was developed based on the five elements of a good team. These elements are not equal in terms of importance, yet they were scored equally. It would be helpful to decide which elements were most important and to weight the scores for the questions accordingly. Because there was a correlation in the Collaboration Survey with the expert rankings and the Thermometer, this alteration could potentially lead to the Collaboration Survey being a better predictor of collaboration.

Another option would be to have the Collaboration Survey given to participants each week along with their Thermometers. Some of the questions might need to be altered to reflect weekly feedback rather than overall program feedback. For example, instead of asking, "Did your team progress through the four stages of group development," it could be asked, "Is your team showing signs of progress in terms of the four stages of group development?" Asking participants to fill out a Collaboration Survey along with the Thermometers each week could pose the risk of fatigue on the part of the participants and lessen the true reflective aspect of the measures; however, it could also get team members thinking in terms of overall development of their teams from the onset of the program. By repeating this study and giving the Collaboration Survey to participants each week, it would be interesting to see if the Collaboration Survey held any more weight in predicting the success of a team. If it did not, then that would simply further support the use of the Thermometers as a good measure of collaboration. Regardless of which measure is used, it is important for team members to have a thorough understanding of collaboration and to be able to practice it as professionals. Finding the best measurement tool to assess this collaboration would prove to be a valuable asset to the MU Summer Enrichment Program so that it could continue to prepare future professionals better for the demands of teaming in their future careers.

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# Appendix A

# **Temperature Rating Scale**

Date \_\_\_\_\_

Team \_\_\_\_\_

Please answer the following questions using a scale from 1 to 10:

Circle your response.

1 = poor 10 = excellent

- 1. How have you done this week? 1 2 3 4 5 6 7 8 9 10
- 2. How did your team do this week? 1 2 3 4 5 6 7 8 9 10

# Appendix B

# **Collaboration Survey**

Rate your summer practicum team experience.

|    | ongly<br>agree  | 2<br>Somewhat<br>Disagree       |         | 3<br>sagree |          | 5<br>Agree |         |               | 7<br>Strongly<br>Agree |  |  |
|----|---|---------------------------------|---------|-------------|----------|------------|---------|---------------|------------------------|--|--|
| 1. | Do you fe   | el you had the                  | best ex | perienc     | e possil | ole work   | ting in | a collaborati | ve model?              |  |  |
|    |   |                                 | 1       | 2           | 3        | 5          | 6       | 7             |                        |  |  |
| 2. | <ul> <li>2. Did the summer program foster an environment for team collaboration, and did it help you to better understand how a team functions within a school setting?</li> <li>1 2 3 5 6 7</li> </ul> |                                 |         |             |          |            |         |               |                        |  |  |
| 3. | <ul> <li>3. Has this experience given you a better understanding of how grade level teams work together toward a common goal?</li> <li>1 2 3 5 6 7</li> </ul>   |                                 |         |             |          |            |         |               |                        |  |  |
|    |   |                                 | I       | Z           | 3        | 5          | 0       | /             |                        |  |  |
| 4. | -   | team collabor<br>ent with succe |         | h each      | other a  | nd prog    | ress th | rough the 4   | stages of group        |  |  |

1 2 3 5 6 7

5. Within your team do you feel all the needs of the students were met and that each member of the team used all of his or her individual talents appropriately?

1 2 3 5 6 7

## Appendix C



Office of Research Integrity

July 13, 2012

Sandra Stroebel, Ph.D. Program Director Associate Professor Marshall University Graduate College

Dear Dr. Stroebel:

This letter is in response to the submitted abstract for your evaluation of the Marshall Summer Enrichment Program. After assessing the abstract it has been deemed not to be human subject research and therefore exempt from oversight of the Marshall University Institutional Review Board (IRB). The Code of Federal Regulations (45CFR46) has set forth the criteria utilized in making this determination. Since the information in this study consists solely of a program evaluation it is not human subject research and therefore not subject to Common Rule oversight. If there are any changes to the abstract you provided then you will need to resubmit that information for review and determination.

I appreciate your willingness to submit the abstract for determination. Please feel free to contact the Office of Research Integrity if you have any questions regarding future protocols that may require IRB review.

Sincerely,

Bruce F. Day, Th.D., CIP Director Office of Research Integrity

# **Marian Pyles**

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## Objective

To complete a thesis project dealing with the evaluation tools of the Marshall University Graduate School Summer Enrichment Program as part of the requirements in obtaining an Education Specialist Degree in School Psychology.

## **Education and Training**

Master of Arts in Special Education—Marshall University, May 2009

Bachelor of Arts in Psychology-Marshall University, May 2006

## Experience

*Fall 2011- present*—working as a special education teacher for students with mental impairments at George Washington High School, Charleston, West Virginia. Responsible for evaluating individual needs and goals of the students and planning and implementing lessons accordingly.

*Fall 2009-Spring 2011*—worked as a special education teacher for students with learning disabilities at Poca High School, Poca, West Virginia. Taught in co-teaching environments as well as special education resource rooms for physical science, civics, geometry, and language arts.