UNIVERSITÉ DE SHERBROOKE

L’Étude du Travail d'Équipe et Leadership dans un Programme de Théâtre Professionnel

Exploring Teamwork and Leadership in a Professional Theatre Program

Par

Pierre Dussol

Essai présenté à la Faculté d'Éducation
En vue de l’obtention du grade de
Maître en éducation (M.Éd.)
Maîtrise en enseignement au collégial

Juillet, 2011

©Pierre Dussol, 2011
UNIVERSITÉ DE SHERBROOKE

Faculté d’Éducation

Maîtrise en enseignement au collégial

L’Étude du Travail d'Équipe et Leadership dans un Programme de Théâtre Professionnel

Exploring Teamwork and Leadership in a Professional Theatre Program

Par

Pierre Dussol

a été évalué par un jury composé des personnes suivantes:

Research Supervisor  Carolyn Lewis Della, Ph.D.  Directrice de l’essai
External Evaluator  Stephen G. Taylor, Ph.D.  Évaluatrice de l’essai
SUMMARY

Theatre is a collaborative endeavour in the professional world; it is for this reason that the Professional Theatre Program at John Abbott College (located at Ste Anne de Bellevue, Quebec) simulates this "real world" environment by assigning students into managerial and leadership positions. At the same time, the theatre faculty aims to give them an opportunity to use their hands exercising the technical skills learned in the classroom. In the process of executing these tasks, they are developing interpersonal skills as well.

After reviewing the literature, it was discovered that there are various studies that have been done that reveal there are different types of teamwork (Chan et al., 2004; Kuech, 2004; Page & Donelan, 2003) and studies that have examined different levels of leadership (Bass & Hater, 1988; Podsakoff et al., 1990). Developmental psychologists such as Erik Erikson (1963) and Abraham Maslow (1943) have offered theories that help understand how young adults may behave in groups. Reviewing the literature helped in refining a paradigm that was created to reflect observations and helped to formulate the research design.

A model, called an Enterprise Taxonomy, was devised by the researcher to identify five stages students appear to ascend through, during their three years in the Professional Theatre program at John Abbott College. It is based on the researcher's observations over many years. The taxonomy shows that there is a natural progression from working on a solo task, to teamwork, to managers and to leaders.

A survey was distributed to 44 design/technical students of the three year professional Theatre Program at John Abbott College. Using a Likert Scale, students were asked to indicate their agreement or disagreement on items regarding leadership, teamwork, management and conflict resolution. They were also asked questions on
three videos they were shown. The videos portrayed dilemmas. The answers to these questions were used to measure students’ leadership attributes as applied to a real situation. This then was analyzed in terms of the Enterprise Taxonomy.

It was found that students did not show a significant differentiation by year as was hypothesized. The data suggests, however, that the majority of students in the Professional Theatre program possess very good social skills and strong attributes of teamwork. Likewise their conflict management skills and transformational leadership qualities are evident. It is very possible that knowing that theatre is a team oriented field, the program attracts these types of students.

Two chi-square tests were run using the data collected on questions that would reveal *phronesis* (practical wisdom). Although there did not appear to be a difference between first year, second year or third year, as was expected, there was a significant difference between students in the two streams in the Program – technical and design. Technicians demonstrated more practical wisdom (phronesis) than designers.

The recommendations to be offered from the results of this study include the use of a new instructional strategy that allows for teaching of management and leadership qualities in parallel with the task oriented sessions of the class. This type of instruction is known as modeling, and is one of the instructional strategies of an informal curriculum (Hafferty & Hafler, 2011).
# Table of Contents

SUMMARY ................................................................. 4  
LIST OF TABLES ....................................................... 8  
LIST OF FIGURES ....................................................... 9  
RÉSUMÉ ................................................................. 10  
DEDICATION ............................................................ 12  
ACKNOWLEDGEMENTS ............................................... 12  
INTRODUCTION ........................................................ 14  

CHAPTER ONE: PROBLEM STATEMENT ............................. 18  

CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK .............................................................. 20  
1. RESEARCH CONTEXT ............................................... 20  
2. TEAMWORK ......................................................... 23  
3. CONFLICT MANAGEMENT ......................................... 26  
4. LEADERSHIP ........................................................ 32  
   4.1 The Perception of Leaders .................................... 32  
   4.2 The Role of Leaders .......................................... 33  
   4.3 Characteristics of Extraordinary Leaders (Heroes) ...... 39  
5. THE ENTERPRISE TAXONOMY ..................................... 41  
6. DEVELOPMENTAL THEORIES ..................................... 41  
7. THE ATTRIBUTES OF PHRONESIS ................................ 49  
8. SUMMARY ........................................................... 51  

CHAPTER THREE: RESEARCH QUESTIONS ........................... 54  

CHAPTER FOUR: METHODOLOGY .................................... 58  
1. PURPOSE AND DESIGN OF STUDY ............................... 58  
2. PARTICIPANTS / SAMPLING ....................................... 58  
   2.1 Protection of Human Subjects ............................... 59  
3. INSTRUMENTATION ................................................ 60  
4. PROCEDURES ....................................................... 63
5. DATA ANALYSIS .................................................................64

CHAPTER FIVE: RESULTS ..................................................66

CHAPTER SIX: DISCUSSION ..............................................70

1. ATTRIBUTES .................................................................70
   1.1 Personality (Solo) ....................................................70
   1.2 Team ..................................................................70
   1.3 Management and Conflict Resolution .........................71
   1.4 Transformational Leadership .....................................73
   1.5 Phronesis ...............................................................74
      1.5.1 Responsible Assertive Leadership Demonstrating Phronesis ....74
      1.5.1.1 Comparison of Responses of First Year, Second Year and Third Year Students to Fly floor Video. The responses .......74
      1.5.1.2 Comparison of Responses of Design and Technical students to the Fly Floor Video. The data was then analysed ..........76
      1.5.2 Phronesis Related to the Use of a Table Saw ...............76
         1.5.2.1 Comparison of Responses of First Year, Second Year and Third Year Students. The responses were coded based ..........77
         1.5.2.2 Comparison of Responses of Design and Technical students. The data was then analysed comparing designers and ..........77

CHAPTER SEVEN: CONCLUSION ...........................................80

1. CONCLUSION ................................................................80
2. LIMITS OF THE STUDY ..................................................82
3. RECOMMENDATIONS ....................................................83

BIBLIOGRAPHICAL REFERENCES .......................................86

APPENDIX A: SURVEY .......................................................92

APPENDIX B: CONSENT FORM ...........................................101

APPENDIX C: MEAN AND STANDARD DEVIATION PER ITEM BY YEAR .......................................................105
LIST OF TABLES

Table 1 Mean per Item per Year .................................................................67
Table 2 Mean per Item by Stream ..........................................................68
Table 3 Comparison of Frequencies for First, Second and Third year Technical and Design Students for Correctly Answering Item #29, which Demonstrates Responsible Assertive Leadership ........................................................ 68
Table 4 Comparison of Responses Made by Design and Technical Students Responding to Item #29, (Demonstrating Responsible Assertive Leadership) ..........................................................................................69
Table 5 Comparison of Frequencies for First, Second and Third Year Technical and Design Students for Correctly Answering Item #32, (Demonstrating Phronesis) ..........................................................69
Table 6 Comparison of Responses Made by Design and Technical Students Responding to Item #32, (Demonstrating Phronesis) ..........................................................................................69
LIST OF FIGURES

Figure 1. Enterprise Taxonomy ................................................................. 15
Figure 2. Rahim’s Styles of Handling Interpersonal Conflict .................. 27
Figure 3. Conerly & Tripathi’s Conflict Styles ...................................... 31
Figure 4. Moore’s Leaders vs. Managers ................................................. 36
Figure 5. Enterprise Taxonomy ................................................................. 41
Figure 6. Erik Erikson’s Psychosocial Stages ......................................... 43
Figure 7. Abraham Maslow’s Hierarchy of Needs ................................. 46
Figure 8. Enterprise Taxonomy and Psychological Alignment ................ 47
Figure 9. Following Safety Rules ............................................................. 50
Figure 10. Breaking Safety Rules ........................................................... 50
Figure 11. Front Elevation of Casgrain Theatre .................................... 62
Figure 12. Following Safety Rules ........................................................... 63
Figure 13. Breaking Safety Rules ........................................................... 63
RÉSUMÉ

Le théâtre est un effort de collaboration dans le monde professionnel, c'est pour cette raison que le programme de théâtre professionnel au Collège John Abbott (situé à Ste-Anne de Bellevue, au Québec) simulce ce "monde réel" en attribuant des étudiants dans des positions managériales et de leadership. Au même temps, la faculté de théâtre vise à leur donner une occasion d'utiliser leurs mains en appliquant les compétences techniques apprises en classe. Dans le processus d'exécution de ces tâches, ils développent ainsi des compétences interpersonnelles.

Après avoir examiné la littérature, on a découvert qu'il y a plusieurs études qui ont été faites qui montrent qu'il existe différents types de travail d'équipe (Chan et al., 2004; Kuech, 2004; Page & Donelan, 2003) et des études qui ont examiné les différents niveaux de leadership (Bass & Hater, 1988; Podsakoff et al., 1990). Les psychologues du développement tels que Erik Erikson (1963) et Abraham Maslow (1943) ont proposé des théories qui aident à comprendre comment les jeunes adultes peuvent se comporter en groupe. Une revue de la littérature a contribué à raffiner un paradigme qui a été créé pour refléter sur les observations et a aidé à formuler la conception de la recherche.

Un modèle, appelé taxonomie d'entreprise, a été conçu par le chercheur pour identifier les cinq étapes que un étudiant semble monter à travers, pendant leurs trois années dans le programme de théâtre professionnel au Collège John Abbott. Il est basé sur les observations du chercheur pendant de nombreuses années. La taxonomie montre qu'il y a une progression naturelle de travailler sur une tâche en solo, au travail d'équipe, aux gestionnaires et aux dirigeants.

Un sondage a été distribué à 44 étudiants de conception/techniques du programme de théâtre professionnel de trois ans au Collège John Abbott. En utilisant une échelle de Likert, les étudiants étaient invités à indiquer leur accord ou leur désaccord sur les éléments concernant le leadership, travail d'équipe, gestion et la résolution des conflits. Ils ont également étaient posés des questions sur trois vidéos qu'ils ont étaient montrés. Les vidéos dépeint des dilemmes. Les réponses à ces questions ont été utilisées pour mesurer les attributs de leadership aux étudiants, appliqué à une situation réelle et ils étaient donc analysés en termes de la taxonomie d'entreprise.

Il a été constaté que les élèves n'ont pas montré de différence significative par année comme cela a été supposé. Les données suggèrent toutefois que la majorité des étudiants dans le programme de théâtre professionnel possèdent de très bonnes compétences sociales et des attributs du travail d'équipe. De même, leurs compétences en gestion des conflits et des qualités de leadership transformationnel
sont évidentes. Il est très possible que, sachant que le théâtre est un champ en équipe, le programme attire ces types d'étudiants.

Deux tests du chi carré ont été effectués en utilisant les données collectées sur les questions qui pourraient révéler phronèsis (sagesse pratique). Bien qu'il ne semble pas être une différence entre la première année, deuxième année ou troisième année, comme cela a été prévu, il y avait une différence significative entre les étudiants dans les deux filières du programme, soit techniques et de conception. Les techniciens ont démontré plus de sagesse pratique (phronèsis) que les concepteurs.

Les recommandations qui seront offerts à partir des résultats de cette étude comprennent l'utilisation d'une nouvelle stratégie pédagogique qui permet à l'enseignement de la gestion et des qualités de leadership en parallèle avec les séances orientées vers la tâche de la classe. Ce type d'enseignement est connue comme la modélisation, et est l'une des stratégies pédagogiques d'un programme informel (Hafferty & Hafler, 2011).
DEDICATION

This project would have been impossible to complete without the indefatigable emotional support from two special people to whom I dedicate this project to, my mother Rita Dussol and my wife Maria Panzuto.

ACKNOWLEDGEMENTS

A large scale project such as this one would not have been possible without the professional, academic, support from two essential people: Dr. Carolyn Lewis Dellah, for all her tireless work as research supervisor. She set the bar very high and helped me keep the project on track and collaborated with me on every aspect of this research project. Her work ethic, dedication academic background and kind demeanour made it very easy for me to trust her and accept major changes made since the first draft; my wife Dr. Maria Panzuto, for helping with the quantitative data, formatting the project, and her continuous support in all things academic.

Sally Barringer Robinson for her assistance in finding supporting documents for this study. Diane Wilson for seeing my potential and convincing me to join the Masters program. Also for helping me with the formatting of the final draft, from start to finish she was there for me.

My cohort who was made up of wonderful dedicated teachers from every CEGEP on and off the island of Montreal. What a privilege it was to be in the company of such supportive and inspiring colleagues. My car-pool pals Sally and Carol always there to discuss the latest homework assignment, always ready for class.

Christopher Brown and Peter Vatsis for appearing in the videos that were produced for this project and for their encouragement and support over the last five years.
INTRODUCTION

The first item of the mission statement from John Abbott College states...

Foster in our students the ability to make and articulate informed intellectual, aesthetic and ethical decisions, while demonstrating skills needed for success in modern society.

This is a significant statement of purpose as it strives for student success in many ways. It suggests that students are encouraged to think critically to overcome adversity, be competent in their field, to be valued by their employers, and to be responsible citizens to make a better community. In the same vein the Professional Theatre Program strives to cultivate leaders. To accomplish this goal it is important to try to understand the growth of leadership in our students. If we are able to understand it and see evidence that display it, we can then, as educators encourage and foster leadership in our students.

The researcher has developed a taxonomy that reflects his observations of students in theatre courses. It is called the Enterprise Taxonomy (Figure 1). The taxonomy shows that there is a natural progression from working on a solo task, to teamwork, to managers and to leaders. The most difficult transition seems to be from team members to managers. If this study is able to shed some light as to why this is a problem, the Professional Theatre Program may continue to produce tomorrow’s leaders at an even higher rate.
The bottom stage known as “solo” is occupied by one person or individuals working on a task without any collaboration or cooperation with others. As a student progresses through their academic career, most of their school work is done alone. The second stage is “team” and is potentially the most effective way in which a group of individuals can work. The purpose of an effective team is to ultimately accomplish a task using human relation skills, during a minimum amount of time while using all possible resources. The third stage “managers” are those who optimize procedures to accomplish tasks, aim for continuity, and do well in situations of constant stability. They must also keep the workforce efficient and overcome any opposition, disagreements or friction that may arise from the execution of tasks. The fourth stage “leaders” are those who innovate existing procedures to maximize efficiency and aim to be dynamic in circumstances of ambiguity to stay ahead. They lead by example and exert confidence in their decisions. They are also able to transmit a sense of mission and strive to transform the workplace into people who take pride and have an emotional stake in their tasks and ultimately the goal of the organization. “Heroes” is the term designated to the top stage of the taxonomy. It is the individuals at this stage that will ask what and why, rather than, how and when. They will challenge the status

Figure 1. Enterprise Taxonomy
quo rather than accept it and take extraordinary risks even when the stakes are high. They will see and do the right thing not only do the things right. They will adhere to the spirit of the law or rules rather than to the letter of the law or rules.

Based on the literature review, a study was designed to gather data from students of the three year Professional Theatre program at John Abbott College. A survey was given, which included questions regarding personality, teamwork, management, conflict resolution and leadership. It also included open-ended questions on three videos to elicit data from students based on real life situations to measure leadership attributes. The goal was to gather data in order to determine where students are situated on the Enterprise Taxonomy.
CHAPTER ONE: PROBLEM STATEMENT

Theatre is a collaborative endeavour in the professional world; it is for this reason that the Professional Theatre Program at JAC simulates this "real world" environment by assigning students into managerial and leadership positions. We want to give them an opportunity to use their hands exercising the technical skills learned in the classroom. In the process of executing these tasks it is necessary to develop interpersonal skills, as well.

After many years of employing this two-pronged instructional strategy, the faculty has observed that while most students make a successful transformation into leaders, others do not. There are students who acquire and develop technical skills but do not develop interpersonal skills and have difficulty working in groups. There are others who are able to organize tasks as managers but are not able to achieve their goals while keeping their subordinates in high spirits. Some students in leadership positions may be able to demonstrate guidance but are unable to transfer enthusiasm to their subordinates regarding the final goal. This study will look at what are the structures that foster effective teamwork, what are the attributes of managers and leaders, and why some students are unable to rise to the challenge of becoming managers and eventually leaders.
CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

1. RESEARCH CONTEXT

As a student progresses through their academic career, most of their school work is done alone. Their success depends on their dedication to each pedagogical task and the ability to overcome many obstacles such as fear and acceptance. However, a good deal of academic work is done in groups of peers. The extent to which the student participates and learns vary, depending on a number of factors. Educational researchers (George, 1995; Robbins, 1995; Asmus & James, 2005; Page & Donelan, 2003) have studied the dynamics of group work and have identified the phenomena of “social loafing”. In George’s study (1995) of social loafing he describes the example of two hypothetical students named John and James. John has a fear of failure that is preventing him from revealing his full potential and James is bored and unmotivated in class. Once these two students join a group, their peers will realize that their contribution to the team is low and ineffective.

George’s article explores one of the root causes of poor performances in students who start to work in groups. In some cases group productivity falls short of the estimated productivity. An explanation of this is that individuals may put forth less effort into groups because there are others who take charge. John and James may in this situation, work even less. George states that in group situations, individuals may feel as though their individual effort may be unidentifiable and that their work will go unrewarded or lack of work unpunished. Individuals need to be held accountable for their work and it is important to note that a group although working as a team is made up of individuals. The problem with John and James is not that they were ineffective in the team setting but rather that they were ineffective individually to start off with. It was their individual performances that were the first problem which happened to turn up once more in their teamwork.
George's article also explores one side of the spectrum of students who have had trouble on solitary tasks. Robbins (1995) examined what he called the "sucker effect" as a factor that sometimes occurs in groups. He explored the other end of the spectrum where there are students who are individually capable of completing academic tasks but do not succeed in a group setting. The "sucker effect" is described as the act of holding back effort in group-related tasks to avoid being a sucker and having to do all the work. Robbins conducted an experiment that involved 70 students each of whom were paired with a confederate to accomplish cognitive tasks. The students were told that their partner (confederate) possessed the same level of ability as themselves. The experimenter leaves the room, at which point the confederate verbally communicates their intended level of effort, high or low, on the assigned task. In doing this experiment Robbins tested three hypotheses. The first hypothesis was that social loafing on thought provoking cognitive tasks is a result of member attempts to maintain equity and to avoid being played for a sucker. Participants will loaf when working in a group in order to maintain labour equity only when others do so as well. This was supported in the results as subjects were loafing when the confederate stated that he was going to loaf. The second hypothesis was that there would be no loafing when the subjects believe that their partner would not be loafing. This was also supported when the confederate stated that they were going to work hard on the project the students did as well. The third hypothesis was that social loafing would occur even on thought-provoking, personally involving tasks that offered the subjects an opportunity for a unique contribution. Social loafing occurred again when the confederate stated that they were going to loaf.

The findings of the experiment are very interesting as it transforms a problem that was thought to be pedagogical in nature into a look into human behaviour. The enthusiasm to work on a project was affected by one individual who stated their intention on the project. If the statement was positive it seemed to unite the students to complete the tasks, alternatively, if it was negative it seemed to poison the effort and social loafing occurred.
The work of Asmus and James (2005) looks into the effect of this phenomenon in their study entitled Nominal Group Technique (NGT), Social Loafing, and Group Creative Project Quality. The NGT is an approach to solicit individual input in group projects, to facilitate the generation of ideas by ultimately encouraging quality participation. The NGT included four stages of preparation for the groups before the tasks were distributed or the labour expended. The first stage was to brainstorm individually to come up with ideas to be presented to the group. The second stage known as the choosing stage is where the group gathers all the individual ideas for consideration. In the third stage the group discusses all the combination of possibilities and comes up with an idea. The last stage is assigning tasks and discussing in which order the elements will come together. The objective of the study was to see if implementing the NGT could reduce social loafing.

The study was conducted using 16 groups of 4 students, they were then divided into 8 groups who were introduced to, and encouraged to use the first two stages of the NGT technique while the other 8 groups were simply given their assignment with no mention of the NGT. The results indicated that there was significantly less social loafing in the groups that used the NGT technique. This study also concluded that social loafing is infectious in a similar way that the Robbins study was. Both studies concluded that it is not only the witnessing of the task being done with no effort or not at all but the perception of what the effort of others will be. The perception of effort (or lack thereof) could be initiated verbally or by body language. Just stating a negative comment could generate an avalanche of social conformity that could end in a collective group social loafing.

As we know the forming of a team can be precarious in academia, the same can be said of any enterprise in the corporate world or a factory floor. The objective of a study conducted by Page and Donelan (2003) was to reduce social loafing by implementing team building tools. Page and Donelan began by using the NGT
strategy used in the Asmus and James study to foster team discussion. Then they went further and worked on tools to build a team on a psychological level. The process they introduced first started by creating a psychological contract with all members that specify their function in the relationship. The members come to understand the profound importance of having members that are able to define the tasks and establish clear objectives. This can include rules of conduct and guidelines for time and quality of work. It ultimately spreads the responsibility equally to all members. There is an element of owning the tasks with the final goal being to have pride in ones work and a sense of belonging to a group.

2. TEAMWORK

What creates an effective team is a question that has launched a number of studies in both education and business. A good deal of work has gone into defining or describing the attributes of teamwork and how it can be fostered (Chan, Chan, Chiang, Tang, Chan, & Ho, 2004; Kuech, 2004; Page & Donelan, 2003). Likewise, some studies have looked at how groups are managed in such a way as to promote positive development and have identified some revealing styles of interpersonal conflict development (Mills & Beleveau, 1999; Tuckman & Jensen, 1977).

According to Kuech (2004), the concept of teamwork is divided into two major types, cooperative and collaborative. In a cooperative situation teammates are independent and need to only be responsible and understand one component of the final task. It is then assembled with the other pieces at the end and therefore are responsible for only one component of the project and not its overall success. It is essential that the cooperative teamwork method has a manager driven to succeed since there is little motivation for each team member to look at the overall picture.

Kuech (2004) explains that in a collaborative situation teammates are interdependent and need to interact on every piece of the puzzle and therefore share
in the responsibility of the project’s overall success. It is not essential that collaborative teamwork has a manager for success since there is motivation for each team to look at the overall picture. In essence, it is more like having lots of managers who are in agreement and checking each other’s progress. This is why the collaborative method is one step closer to managing.

The fundamental nature of teamwork is for many individuals to work in harmony towards a common goal. In order for teamwork to be effective, there must be good communication (Chan et al., 2004; Page & Donelan, 2003). Furthermore, factors such as trust and personalized interaction encourage group cohesion (Mills & Beliveau, 1999; Tuckman & Jensen, 1977).

The concept of teamwork often fails in times of limited trust, lack of cooperation, ineffective communications and adversarial relationships. Chan et al., (2004) explore the critical success factors in successful teamwork in construction projects. They conclude the following: there must exist mutual trust among team members and a display of reliability in fulfilling their obligations; it is important to have a long term commitment to integrate in times of stability and unexpected problems; lines of communication must be kept open among all members and reaching all levels; coordinating between each sets of tasks and increasing contact as each task becomes more complicated, and conflicts should be resolved by joint problem solving between the parties. Page and Donelan (2003) developed a seven step technique to address these issues called Recognizing and Reinforcing Teamwork Skills. The first step is to know all your team members; second, communicate accurately and unambiguously; third, accept and support one another; fourth, check for understanding; fifth, share ideas and understanding; sixth, check for agreement; and seventh, resolve conflicts constructively and quickly. The goals of the seven step process sounds very much like Kuech’s model of collaborative teamwork.
Mills and Beliveau (1999) report on the pedagogical approach taken by the Building Construction Department at Virginia Tech. It illustrates a trend moving away from a previous focus of a task management approach to a people management approach. This new approach is evident as first, second and third year students work together towards a goal. By using the curriculum to group students together the program reflects the realities of the construction industry through simulation. Taking this approach allows students to improve not only their discipline skills related to construction but people management skills involving communication, leadership, and teamwork. It allows first year students to integrate from their independent class labs where they practice solo execution of their tasks to working with their peers in a team. The second year students have the opportunity to oversee tasks at a managerial level as the third year students delegate responsibility to them allowing them to make effective decisions. The third year students are given leadership responsibilities in people management tasks such as mentoring, encouraging personnel and crew motivation, staffing, preparation, and task management tasks such as presentation, estimating, scheduling and coordination.

Tuckman and Jensen’s (1977) observations of small group development lead them to formulate and propose a five stage model of group development. It begins with the first stage of forming, where the group dynamics are formed and expectations are discussed. The next stage known as storming is the most critical stage when ideas are introduced, discussed and chosen. During this process individuals share their opinions with the group and in so doing they may feel exposed and/or vulnerable depending on the receptiveness level of the group. If the group dynamic is receptive to compromise, is open to suggestions and allows each member to have some input, the group may often move onto organizing the tasks to be done and deciding who will be responsible for each task. The third stage is norming where a sense of belonging and group cohesion is fostered and members feel that they can express opinions more freely as a sense of trust is developed. The last stage known as
performing is the time that the group performs with a feeling of trust, pride in their work as well as appreciation and caring for team members.

Even with the best intentions and all precautions (Tuckman and Jensen’s model for smooth decision making, Page and Donelan’s seven step technique, Mills and Beliveau’s mentoring pedagogical approach) there are still possibilities of intragroup conflict. According to Jehn (1995) all hope is not lost and maybe the conflict can develop into a good catalyst for positive change. It was previously theorized that when group members descend into group conflict that includes friction, anger or personality clashes, they would then work less effectively and produce substandard products. Jehn conducted a study with 589 employees from an international headquarters of a large freight transportation firm that worked in teams. The study showed that, groups that experienced disagreements while performing non-routine tasks did not suffer detrimental effects from their conflict. The results also suggest that in some cases the conflict was actually beneficial to the group as it promoted critical evaluation and decision options of the concerned task. Routine tasks do not need critical evaluations or decision options and so conflicts may stagnate and reach an impasse compared to non-routine tasks that are more dynamic and allow flexibility.

3. CONFLICT MANAGEMENT

According to Rahim (1983) there are two basic dimensions that can determine the styles of handling interpersonal conflict. The first is the concerns for self and the other is concern for others. Rahim’s Styles of Handling Interpersonal Conflict model (Figure 2) expands to include whether a person has a high or low degree of each. For instance, if a person has high concern for self and others, that person will strive to integrate the spirit of both sides of the conflict. A person who displays a high concern for self but a low concern for others will tend to dominate the conflict to get their way. If a person has low concerns for self and others, that person will avoid the
conflict all together. A person who displays low concern for self but a high concern for others will be obliging and will concede to other peoples concerns. Finally one who has medium concern for self and others will tend to compromise.

<table>
<thead>
<tr>
<th>Concern for Self</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concern for Others</td>
<td>High</td>
<td>Integrating</td>
</tr>
<tr>
<td>Low</td>
<td>Dominating</td>
<td>Avoiding</td>
</tr>
</tbody>
</table>

*Figure 2. Rahim’s Styles of Handling Interpersonal Conflict*

Using this grid, Rahim has been able to identify major trends from other studies. When looking at factors such as role status, in a superior-subordinate relationship, subordinates commonly say what is suitable for the type of relationship rather than what is true. An example may be, not mentioning to the emperor that he has no clothes. Therefore, an individual may use a more obliging style with superiors than with a subordinate or peer. Since subordinates are more likely to withdraw from a conflict situation, it could be expected that individuals will more likely use the avoiding style with superiors than with peers, and more with peers than subordinates. Since superiors have a larger stake in the organization, are more goal than relationship oriented and face larger consequences if those goals are not met, the forcing approach is more common in handling differences with subordinates than with peers and much less common with superiors. Alternatively, a compromising approach is expected when both parties in a conflict situation have equal power such as peers. Factors such as gender displays a fascinating trend as there is evidence that males are more dominating and less compromising than females in conflict.

Managing all the tasks involved in a group enterprise where there is potential for conflict takes what Jordan and Troth (2004) terms as emotional intelligence which
can lead to successful conflict resolution. They concur that emotional intelligence contributes to work performance not only in the individual but also in teams. They suggest that there are four steps that lead to successful conflict resolution, the first is perceiving others and being meta-cognitive of the situation. The second is assimilation in terms of prioritizing important deductions of the situation. The third is, understanding complex emotions such as simultaneous feelings such as loyalty and anger. The fourth is emotional management, where in a moment of injustice, individuals control their feelings to overcome the injury, so they may focus on resolving the issue.

While in the pursuit of organizing and executing tasks in a group, DeChurch and Marks (2001) identified that there are times intragroup conflict occurs. In their study the authors looked at two kinds of group conflict, task-related conflicts, when group members argue over the course of action and relationship conflicts due to interpersonal clashes. The study involved 391 students working in 96 groups between 3 to 8 members. The assigned projects were verified by the researchers to be appropriate for the study and required synthesis and application of previous course material. In particular, they were interested in studying task-related conflicts. Conflict management was measured using Rahim Organizational Conflict Inventory rewritten to reflect the specifics of the projects. The instructions on the questionnaire operationalized task conflict as, it occurs in groups when there are disagreements over ideas and alternatives related to your group’s project. It then uses questions such as “How have the members of your group handled differing opinions, ideas, and alternatives related to your group’s task in the past?”

Dechurch and Marks (2001) present two hypotheses for this study that are very relevant to this discussion. The first one is that the use of active (direct and responsive) conflict management will enhance group performance and the use of passive (non-direct, non-proactive) conflict management will detract from group performance. The second hypothesis was that the use of agreeable (pleasant relaxed
compromise) conflict management will enhance group satisfaction, and the use of 
disagreeable (strict or harsh) conflict management will detract from group 
satisfaction. The results that were found indicated that active conflict management 
did not relate significantly to performance, but the use of agreeable task conflict 
management did positively predict satisfaction.

Whereas, the Dechurch and Marks study explores different management 
approaches and the reaction of the students and their outcomes, Bacal (2004) studied 
organizational conflict in the workplace. Bacal (2004) wrote a paper entitled "The 
Good, the Bad and the Ugly". He reports the same kind of findings as Dechurch and 
Marks. Bacal states there are three ways to look at organizational conflict the "bad", 
where conflict is regulated out, the "good" where the causes are dealt with, not just 
the symptoms and the "ugly" where nothing is done. The bad conflict management 
style believes that organizations achieve goals by creating strict structures and make 
all the functions into separate cogs that keep the timepiece functioning. This means 
that when problems arise, the common remedy is to come up with more regulations 
and to centralise power and authority. The drawback to this is that the organization 
devolves into an undynamic and bureaucratic system that controls the people and 
takes the trust and responsibility away. The good conflict management style is one 
that sees conflict as a productive event. It is good since it increases the knowledge 
and skill of those who experienced the conflict. It is a time to be innovative and 
dynamic to solve the problem.

If the bad conflict management style is seen as a situation that calls for 
structure, clarity and orderliness, then the good can be seen as a place where 
creativity, responsiveness and adaptability can flourish. By dealing with the causes of 
conflict rather than supressing the symptoms, it encourages feedback, puts all issues 
on the table and encourages long-term sustainability. Bacal goes on to describe how 
different strategies are used in "ugly" conflict management styles. Non-action is the 
most common strategy where nothing is done and generally results in escalation of
conflict. Administrative orbiting is another instance where nothing is done but the problem is always under consideration. Gestures such as collecting more data or acknowledging the problem but the problem may be offered but is not dealt with. Secrecy is an approach that is used by both the employees and managers, where if no one talks about it or ignores it, it will have the same outcome as non-action. The last strategy is law and order, where managers tell the employees to not be in conflict. This deals with only the symptoms and nothing is solved.

Conerly and Tripathi (2004) examined five different conflict management styles (Figure 3) each includes low, medium or high emphasis on relationships and goals. The first style is withdrawing from conflict because both the relationship and the goal is a low priority. Those who exercise this form of management are neither assertive nor cooperative; they stay away from issues involving conflict due to interpersonal difficulty or helplessness. The second style is forcing. This type of person values accomplishing high goals at the cost of relationships. It is used by those who are competitive and forceful, it can also be used by those who would otherwise have high relationship goals but are in danger of not meeting a deadline. The third style is smoothing that is described as high relationships and low goals. This style is used by those who set aside or compromise goals in favour of wanting to be accepted by all and they avoid conflict in favour of harmony. The fourth style is confronting with high relationships and high goals. In this style one would find people who are assertive enough to find resolutions in relationship conflicts and cooperative enough to accomplish goal objectives. The last style is known as the compromising style with medium relationships and medium goals. These managers are flexible and adaptive because they will split the difference, exchange concessions and seek the middle ground.
The need to maintain efficiency in any organization demands that any conflict should be dealt with quickly. The danger to not deal with conflict may translate into not attaining the organization's goals (Bacal 2004). Many studies (Conerly & Tripathi, 2004; DeChurch & Marks, 2001; Jordan & Troth, 2004) are not only concerned with the goals and success of the organization but with the maintenance of the relationships within groups to maintain group cohesion through long term relationships.

While exploring the importance of group satisfaction one must not forget the bottom line of the corporation, the outcome of an academic institution or a product on the factory floor. These enterprises must after all, produce while keeping personnel in high spirits. Keeping this balance is important but there are times when one must decide what is more important. Is it the goal that is more important, as in the case of DeChurch and Marks, and Bacal, or is it possible that at times relationships are more important than the goal? There are many enterprises where the relationships are much
more important as in the case of volunteers in churches, clubs and associations, where the people involved are there primarily working for the relationships.

4. LEADERSHIP

4.1 THE PERCEPTION OF LEADERS

Any enterprise with complex tasks to be performed needs an organizational structure to keep individuals on task. This mission usually falls to managers. Dingle (1997) would argue that there are two different task masters at the helm, the manager and the leader. Followers perceive the manager and the leader differently. He states:

Managers are optimizers. If a problem arises the manager will implement a procedure to correct it. Managers aim for continuity. If a new problem arises, there is no set procedure for the manager to follow. Managers do not thrive in circumstances of ambiguity, uncertainty and rapid change.

Leaders are innovators. If a problem arises in which there is no procedure to deal with, the leader will create a new procedure. Leaders seek change, which they see as improvement. Leaders thrive in circumstances of ambiguity, uncertainty and rapid change. (p. 2).

Managers are devoted to the task as they see the physical accomplishment of the task as the only way to achieve the goal. Leaders are devoted to the task and those who are accomplishing the task. They see the people who are physically performing the task as the most important component or resource to accomplishing the goal.

The perception of the individual is vital in formulating successful leaders since it is the masses that in essence create the leader with their need to be lead. Cicero and Pierro (2007) claim that it is vital for charismatic leaders to articulate an inspirational vision and behave in a way that fosters an impression that they and their mission are extraordinary. There are leaders whose inspiration is so powerful that they transform the values and priorities of followers and motivate them to perform beyond their expectations and this according to Bass and Hater (1988) is known as
transformational leadership. According to the Cicero and Pierro study, a charismatic leader may embody the standards and values of a group and may even lead the group to identify themselves as having an exclusive membership to the leader's group. This in turn may have effects on higher motivation and group self-esteem.

4.2 THE ROLE OF LEADERS

As Dingle (1997) explains leaders are innovators. If a problem arises in which there is no procedure to deal with, the leader will create a new procedure. Leaders seek change, which they see as improvement. Leaders thrive in circumstances of ambiguity, uncertainty and rapid change. Burns (1978) describes leadership as "a stream of evolving interrelationships in which leaders are continuously evoking motivational responses from followers and modifying their behaviour as they meet responsiveness or resistance" (p. 440). According to Masood, Dani, Barns and Backhouse (2005), in times of great challenges leadership is what organizations, political leaders and educators seek to try to turn the tide of turmoil. Masood discusses that there are two factors in exercising successful leadership, the first is the organizational culture of those being lead, and the second is the ability for the leader to be transformational in their unique situation. If the organizational culture changes, leaders will thrive if they are a "transformational leader", that is if they are able to change and adapt to lead according to the needs of the new organizational culture.

The leader must be a dynamic force in an organization to stay effective but one of the factors of success is out of the leaders' grasp and that is, as De Vries (2000) describes, the perception of the individuals of the organization of the leader. There are two cognitive processes to create what De Vries terms as the Romance of leadership. The first is the recognition process of which individuals or organizations will identify prototypical categories based on results such as dedication, goal oriented, charisma and decisiveness and less prototypical categories based on image such as being likeable and healthy. The second is the inferential process where the
individual or organization will perceive an organization’s success because of the leader. This may in turn, increase the recognition process of the leader and enforce the prototypical categories or even add new qualities.

Transformational and transactional leadership are two important terms that Bass and Hater (1988) explore. A transformational leader is more profound than a transactional leader. A transformational leader is one who performs the leadership role beyond normal expectations as they convey a sense of mission, encourage learning experiences and stimulate critical thinking. The word transformational denotes that the leader strives to transform the workforce into people who take pride and have an emotional stake in their tasks and ultimately the goal of the organization. A transactional leader, on the other hand, attains success by using rewards when the task is completed properly or negative feedback when the task falls short of the set goal. The word transactional refers to the physical transaction that takes place when the workforce gets rewarded when tasks are accomplished and the psychological transaction that takes place when the workforce fails and is berated by the leader. (Perhaps a better term would have been transactional managers.)

Bass and Hater conducted a study to determine whether subordinates would rate transformational leaders more effective than transactional leaders. A total of 54 managers were administered the Multifactor Leadership Questionnaire. The results showed that there was a significant difference between the two groups and that the transformational leaders were more effective than transactional leaders. The survey devised for their study illustrates the traits of both types of leaders. Transformational leaders are expected to possess charisma by instilling pride faith, and respect in followers, has a gift for seeing what is really important and transmits a sense of mission. They show individualized consideration by delegating projects to stimulate learning experiences, provide coaching and teaching and treats each follower as an individual. They arouse intellectual stimulation in followers to think in new ways and emphasize problem solving and the use of reasoning before taking action.
Transactional leaders use *contingent rewards* if followers perform in accordance with contracts or expend the necessary effort. The leader uses management-by-exception by avoiding giving directions if the old ways are working and allows followers to continue doing their jobs as always if performance goals are met.

The physical position of a manager and a leader is well-defined by Sharma (1997). Anyone can be a leader without the title or position, a manager is one’s boss because they were appointed to the position. This is what is known as a top-down determination of control. There is another possible determinate factor known as the bottom-up determination of control, where a leader emerges from the ranks, factory floor or mail room. According to Sharma, a manager is the enforcer of regulations and bureaucracy within any organization. This could be a bad quality to have in times of shifting needs. As Sharma states, it takes dynamic leadership to change an organization’s fortunes if managers are to survive they need to learn how to be leaders.

Another advocate of transformational leadership is Westerman (1994) who draws some comparisons to TQM or Total Quality Management used since the 1980’s. The old model of leadership consisted of the leader at the top of a hierarchical pyramid as seen in the corporate world or the military. Westerman comments that such rigid structures disconnect the leader from the employees both in physical, emotional and psychological terms because the office is at the top floor. The Chinese philosopher Lao Tzu was a source of inspiration for Westerman who once said: “A leader is best when people barely know that he or she exists.”

If the leader is not at the top or noticed at all, Westerman adds that the leader is on the side of the hierarchical pyramid acting as a coach or coordinator. Since the employees are at the same level as the leader, they are empowered to take initiative and make decisions. These coordinator-leaders are, as Cicero and Pierro described,
able to articulate an inspirational vision and behave in a way that fosters an impression of an extraordinary mission.

Team-Oriented forms of Leadership is a term developed by Kezar (1998). It is when a leader looks to the senior members of the team or to those with most experience, wisdom or intelligence to help them in the decision process. Kezar developed this form of leadership based on the TQM model. The leader is undeniably in charge and seeks the council of this team, who are experts in their fields, to come to the most informed and sensible decision. This is a very collaborative form of leadership and is similar to Kuech’s model of collaborative teamwork already discussed. It does not contradict the notion or structure of hierarchy, there is still one leader who guides the decision-making process. As they are sharing in decisions that directly affect the final goal, this process has a transformational effect on all those who are involved as they all have a vested interest in success.

There needs to be one vital characteristic for a leader to possess to successfully allow and nurture Team-Oriented forms of Leadership or TQM, and that is trust. Moore (2007) makes a list of characteristics (Figure 4) that a leader should have and compares it to what managers would possess.

<table>
<thead>
<tr>
<th>Leaders</th>
<th>Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge status quo</td>
<td>Accept status quo</td>
</tr>
<tr>
<td>Trust</td>
<td>Control</td>
</tr>
<tr>
<td>Innovative and develop</td>
<td>Administer and maintain</td>
</tr>
<tr>
<td>Ask what and why</td>
<td>Ask how and when</td>
</tr>
<tr>
<td>Do the right things</td>
<td>Do things right</td>
</tr>
<tr>
<td>Watch the horizon</td>
<td>Watch the bottom line</td>
</tr>
</tbody>
</table>

*Figure 4. Moore’s Leaders vs. Managers*
When a leader delegates to a team the essential component is trust. The alternative to trust is control, which would defeat the purpose of all forms of team-oriented forms of leadership. Moore argues that the people who are delegated are the ones who discover the problem first and therefore also closest to the problem. It is in the best interest of the organization for them to act to solve the problem. In essence it is also in the best interest of the leader to trust those delegated to, to learn about the problem and take action. With this freedom to act in the organization’s best interest grows a sense of ownership that challenges, rewards and calls the underlings to a higher purpose. This transformational process all begins with trust.

The effectiveness of the transformational leader has been praised in many studies as the most effective style of leadership for assured success. The aim of the study conducted by Podsakoff, Mackenzie, Moorman, & Fetter (1990) was to first establish what key behaviours are associated with transformational leadership and secondly to then determine what effects these behaviours have on followers. There are six key behaviours that have been identified to transformational leadership. Identifying and articulating a vision for the enterprise by developing, articulating and inspiring others with their vision. Providing an Appropriate Model that sets an example for employees to follow that is consistent with the values that the leader expects. Fostering the Acceptance of Group Goal to promote cooperation among employees and getting them to work together toward a common goal.

High Performance Expectations that demonstrates the leader’s expectations for excellence, quality, and high performance from followers. Providing Individualized Support that indicates that the leader respects followers and is concerned with their personal feelings and needs. Intellectual Stimulation that challenges followers to re-examine some of their assumptions about their work and rethink how it can be performed.
Organ (1988) identified five types of behaviours that are known as "organizational citizenship behaviours" (OCB). **Altruism** when one displays behaviours that have the effect of helping another person with a task or problem. **Conscientiousness** as when the employee goes well beyond the minimum role requirements of the organization, in the areas of attendance, taking breaks, obeying rules and regulations. **Sportsmanship**, when the employee is willing to tolerate less than ideal circumstances without complaining or making petty grievances. **Courtesy** is displayed by an individual when they pro-actively work at preventing work-related problems with others from occurring. **Civic virtue** is when an individual indicates that they responsibly participate in, is involved in, or is concerned about the life of the company.

Using these behavioural types as identifiers of organizational citizenship, Podsakoff et al. (1990) conducted a study involving 988 employees of a diversified petrochemical company that included both employees and their immediate supervisors. The subjects were given a survey that would solicit feedback on leadership behaviour, trust and loyalty, and on organizational citizenship behaviour. The findings suggested that the leader behaviours did not directly influence the citizenship behaviours. It did however suggest that trust had an important impact on employee satisfaction and in turn the effect of trust had a positive influence on OCB’s. The citizenship behaviours that were an influence included conscientiousness, sportsmanship, courtesy and altruism. It did not have a significant impact on civic virtue. In a remarkable contrast, transactional leaders had a direct impact on OCB’s specifically on sportsmanship and altruism. Podsakoff et al. (1990) suggest that this is because employees are in a transactional relationship with a transactional leader it is possible that the employees are engaging in organizational citizenship behaviours simply to obtain recognition or other rewards. This seems to validate the findings of the Rahim study concerning a superior-subordinate relationship, subordinates commonly say what is suitable for the type of relationship rather than what is true. As described earlier, by not mentioning to the emperor that
he has no clothes they appear to be altruistic when in reality they are acting loyal only for the possible rewards.

4.3 CHARACTERISTICS OF EXTRAORDINARY LEADERS (HEROES)

There are extraordinary leaders who stand out among leaders that can be described as heroes. These risk takers can be thought of as heroes, as Moore explains; their characteristics include that they challenge the status quo rather than accept it. If a problem arises in which there is no procedure to deal with it, and the system is such that no new procedure will correct it, then the hero will break the rules or status quo. They will then innovate and develop new procedures rather than administer and maintain the old defunct methods used before. They will watch the horizon for tomorrow not only watch the bottom line for today. They will ask what and why, rather than, how and when. These questions may lead them to display courage and the will for self-sacrifice for the greater good. They will see and do the right thing not only do things right. Heroics come about as achieving outstanding levels of performance during dramatic situations, while leadership is the ability to consistently foster superior performances.

There are many qualities one requires to be a good citizen, moral person or hero. Aristotle would probably describe a hero as someone that has most, if not all, of the five categories of Intellectual Virtues (in Aristotle, 1998). They include the Theoretical virtues Sophia (wisdom), Episteme (scientific knowledge), Nous (intuitive understanding), the Practical virtue Phronesis (practical wisdom sometimes referred to as prudence) and the Productive virtue of Techne (craft knowledge or practical intelligence). The five theoretical virtues are noteworthy in the sense that they represent knowledge and wisdom which allow the virtuous to understand and see the injustice in the world and to know what the goal should be but do not know what to do to achieve it. Schwartz and Sharpe (2006) state that the productive virtue of techne allows the virtuous to know what to do in order to achieve a goal but does not
know what the goal should be, nor is there a motivation to achieve the said goal. The practical virtue of phronesis possesses all of these traits. This means that the phronimous is able to understand what injustice is happening, know what to do to rectify it, and has the desire to achieve the goal. Whereas the definition of phronesis is “wisdom in determining ends and the means of attaining them” and prudence is “foresight, good judgment, as well as wisdom in looking ahead” it is therefore widely accepted that phronesis may be translated as practical wisdom.

Schwartz and Sharpe (2006) confirm that practical wisdom is the master virtue essential to solving problems and that it is increasingly difficult to nurture and display in modern society. The society that lacks this virtue must then revert to laws to guide those who lack practical wisdom to live a virtuous, safe or just life. This seems to work, however, there are many instances where the word of the law overrules the intention of justice and does not serve the spirit of the law. Barry Schwartz’s best example of this is of the upstanding citizen who buys his seven year old son Mike’s Hard Lemonade (the father does not know that it was an alcoholic beverage). A security guard sees this and calls the police who take the boy to child protective services. All authorities involved stated that they hated to do it but that they had to follow procedure. The legal system is in place because it is impossible for all those concerned to possess practical wisdom, yet there are times when the law punishes the innocent.

Throughout the discussion, the most common element has been that there are people in relationships that execute tasks. When in teams, either in the classroom or the office, team members perform tasks more efficiently when they are higher in spirits. Managers (group leaders or teachers) must decide what balance to strike between goals and relationships, in order to accomplish goals while keeping morale at an acceptable level. Leaders listen to the people and make changes that affect the structure and mechanism of the tasks contributing to higher relationships with the people. Extraordinary leaders listen to the people and when existing structures, rules
or laws impede their success, they break the rules and create new ones to strike a balance between accomplishing tasks and the good of the people.

5. THE ENTERPRISE TAXONOMY

![Enterprise Taxonomy Diagram]

*Figure 5. Enterprise Taxonomy*

It is the author’s conjecture that, much like Bloom’s (1956) taxonomy, the Enterprise Taxonomy (Figure 5) developed by the author, has an affective quality in that, as one moves from the bottom of the pyramid into the upper levels one must attain a progressively higher order of cognition. In the Enterprise taxonomy one must progressively understand the levels of the human condition to excel in each position. To attain success in the upper levels such as management, it is fundamentally important to consider the human aspect involved in the road towards the enterprising goal. While the goal is the important outcome, a good manager or leader should consider that the goal cannot be reached unless the people involved are seen as a valuable resource of the enterprise.

6. DEVELOPMENTAL THEORIES

Since moving through the stages in the Enterprise Taxonomy is essentially a developmental process, it was thought prudent to review developmental theories in
psychology. There are several psychology theorists that have explored the transition from early childhood through adolescence and to adulthood. Both Erik Erikson (1963), a leading developmental psychologist, and Abraham Maslow (1943) a leading behavioural psychologist, divided a span of a lifetime of psychological development into distinctive parts. The desire to understand human development drove both researchers to investigate in their respective fields and are both credited for laying the foundation for human psychological development.

Erik Erikson developed his psychosocial development model based on the epigenetic principle, which simply states that in the fetal development, a baby’s organs develop at certain specified times to eventually form a baby. Erikson hypothesised that the personality of an individual forms in a similar way through a series of interrelated stages. Each of these stages has a critical period of development, each of which has a favourable outcome versus an unfavourable outcome or danger. Erikson’s model divides a span of a lifetime of psychological development into eight distinctive levels (Figure 6). The ability to reach each successive stage with a favourable outcome depends largely on achieving a favourable outcome on the previous stage.
<table>
<thead>
<tr>
<th>Stages</th>
<th>Crisis</th>
<th>Favourable Outcome</th>
<th>Unfavourable Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Childhood</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; year of life</td>
<td>Trust vs. Mistrust</td>
<td>Faith in the environment and future events</td>
<td>Suspicion, fear of future events</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; year</td>
<td>Autonomy vs. Doubt</td>
<td>A sense of self-control and adequacy</td>
<td>Feelings of shame and self-doubt</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; through 5&lt;sup&gt;th&lt;/sup&gt; years</td>
<td>Initiative vs. Guilt</td>
<td>Ability to be a &quot;self-starter,&quot; to initiate one's own activities</td>
<td>A sense of guilt and inadequacy to be on one's own</td>
</tr>
<tr>
<td>6&lt;sup&gt;th&lt;/sup&gt; year to puberty</td>
<td>Industry vs. Inferiority</td>
<td>Ability to learn how things work, to understand and organize</td>
<td>A sense of inferiority at understanding and organizing</td>
</tr>
<tr>
<td><strong>Transition years</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescence</td>
<td>Identity vs. Confusion</td>
<td>Seeing oneself as a unique and integrated person</td>
<td>Confusion over who and what one really is</td>
</tr>
<tr>
<td><strong>Adulthood</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early adulthood</td>
<td>Intimacy vs. Isolation</td>
<td>Ability to make commitments to others, to love</td>
<td>Inability to form affectionate relationships</td>
</tr>
<tr>
<td>Middle age</td>
<td>Generativity vs. Self-absorption</td>
<td>Concern for family and society in general</td>
<td>Concern only for self one's own well-being and prosperity</td>
</tr>
<tr>
<td>Aging years</td>
<td>Integrity vs. Despair</td>
<td>A sense of integrity and fulfilment; willingness to face death</td>
<td>Dissatisfaction with life; despair over prospect of death</td>
</tr>
</tbody>
</table>

*Figure 6. Erik Erikson's Psychosocial Stages*

The first four stages take place during childhood years and begin with *Trust versus Mistrust* that starts at birth and continues for the first year. At this stage
newborns need to trust their world through consistency and continuity with caring parents. Nevertheless if the child’s rearing is inconsistent and parents vary in quality of care then the child may be in danger of seeing the world with suspicion and fear. At ages 2 to 3 years a child will enter the Autonomy versus Shame and Doubt stage. This stage ushers in a time when toddlers are exploring their world and able to reach a certain degree of autonomy. If parents or care givers are impatient or too scolding then the toddler is in danger of developing shame and self-doubt. During the ages between 4 to 5 children are in the Initiative versus Guilt stage where they participate in physical activities, experiment and ask questions, they may then learn to take initiative of their own. If parents, caregivers or teachers make the child feel that their questions are pointless or a nuisance the child is in danger of feeling guilty about their curiosity. At ages 6 to 11 years children start school where they reach the Industry versus Inferiority stage. At this stage a child is encouraged to produce work at school and therefore be industrious. With time they can develop pride in their work through praise and rewards. If a child is met with indifference or his work or is unrewarded, a sense of inferiority may develop and make the child feel worthless.

The last four stages take place in the transition years and in adulthood starting with Identity versus Role Confusion in the transition years of adolescence aged 12 to 18 years. This crucial stage is when adolescents learn to develop identities and learn appropriate behaviour in different situations, to eventually fit into society as adults. If they do not achieve this goal there is a danger of role confusion where they feel as though they do not fit into society. The first stage in adulthood is known as Intimacy versus Isolation with young adults aged 18 plus. At this stage the young adults need to establish close and committed intimate relationships and partnerships with other people. If they are incapable of such commitment they run the risk of feeling isolated as there is no intimacy being reciprocated. At middle age adults reach the Generativity versus Stagnation stage where the desire to guide, establish and teach the next generation arises. Failing to do so, leads them to the unfavourable outcome of stagnating and becoming self-absorbed. The last stage known as Ego Integrity
versus Despair occurs in old age. It affirms the acceptance of one’s life cycle, the meaning of the life they lead and the impact it had on others. In a sense being content and having no regrets in the life that was lived. If one does not reach this stage they become despairing that life is now too short to change anything.

Maslow a prominent behavioural psychologist of his time was later influenced by the humanistic side of psychology, which lead him to delve into new theories of human development. He believed that there were two theories of psychology: theories about the sick, which at the time his contemporaries were deeply focused on, and theories about the healthy which were not being pursued at the time of his research. Inspired by the belief that individuals are motivated to seek a fulfilling life he proposed a five levelled pyramid known as the hierarchy of needs (Figure 7). Each level reflects the relative desire for the need and the relative ease of attaining the need. The lower needs are considered basic needs while the higher needs are more abstract and difficult to obtain. Therefore, basic needs must be obtained first since it is more improbable to attain higher needs without first attaining the lower level needs.
Transcendence
helping others to self-actualize

Self-actualization
personal growth, self-fulfillment

Esteem needs
achievement, status, responsibility, reputation

Belongingness and Love needs
family, affection, relationships, work group, etc.

Safety needs
protection, security, order, law, limits, stability, etc.

Biological and Physiological needs
basic life needs - air, food, drink, shelter, warmth, sex, sleep, etc.

Figure 7. Abraham Maslow’s Hierarchy of Needs

The first four needs Physiological, Safety, Love and Belonging and Esteem arise from deprivation and instinct and are known as the deficiency needs. Physiological needs are the most basic instinctive needs such as air, food and shelter and are always met first before any other need. Safety needs emerge after the physiological needs are met and include security, stability, law and order. The Love and Belonging stage is dominated by a strong social desire for affection from family and people in general. It is also a stage where one needs to belong in groups, such as a family member in a family unit, colleague in a work place groups or a classmate in school. Esteem needs are classified into two sections; first the desire for achievement and confidence in the world that leads to independence and freedom; second, the desire for reputation and prestige or the respect and esteem from other people such as recognition, attention, importance and appreciation. Self-Actualization is considered to be a growth need because it is not instigated from a lack of something but rather the desire to grow and feel fulfilled. The manifestation of self-actualization may take
many different forms in people from being an ideal mother to an exceptional painter, poet, athlete or any other occupation that one has reached their full potential in. Maslow later added *Self-Transcendence*, which has been described as a spiritual level. Most importantly this level recognizes the human need for ethics, altruism, creativity, compassion and spirituality.

For the purposes of this research study it is necessary to consider the psychological development of students aged from 17 to early 20’s since we are asking them to become instantly responsible as they are thrust into managerial and leadership positions. To illustrate the psychological development that individuals require in their transition from adolescence to young adulthood the enterprise taxonomy has been aligned with both Erikson’s and Maslow’s (Figure 8).

Looking at Erikson’s fifth developmental stage, *Identity Versus Role Confusion* stage adolescents are struggling to develop the skills that will prepare them to fit into adult society. They do this by discovering themselves, by successfully integrating into groups with proper behaviour and finding their own identity. Without
this step, students may be unsuccessful in working with others in teams as shown on the second step "Team" of the Enterprise taxonomy. Erikson's next developmental stage is the sixth stage referred to as the Intimacy Versus Isolation stage. At this stage young adults should be developing close and committed intimate relationships and partnerships with people. This stage offers a look into, and forms a basis for caring for other people, it often starts at home and blossoms out into the world as friendships as they begin to understand and accept diverse people. Without this vital step, students may be unsuccessful in managing others as shown on the third step "Manager" of the Enterprise taxonomy as they may feel isolated and disconnected from the group that they are supposed to manage.

Maslow's third level, Love/Belonging may be required to ascend to the "Team" level of the Enterprise taxonomy. At this stage students need to feel a sense of belonging and acceptance by their peers. The instructional strategy of forming the crews in our department offers this opportunity and a common goal for students to focus on which is a catalyst for belonging. Maslow’s fourth level of Esteem could be required to rise to the "Manager" level of the Enterprise taxonomy. At this level students attain self-esteem and confidence to deal with subordinate students; it is then possible to acquire respect from them and respect for them. This is a fundamental requirement since as managers they now need to deal interpersonally to achieve their tasks. The "Leader" level of the Enterprise taxonomy is best represented by Maslow’s fifth level of "Self-actualization". As a leader, students need to be creative and spontaneous so that they can problem solve, which is an essential action that people look to that almost defines leadership.

The "Hero" level of the Enterprise taxonomy is unique and sometimes unattainable. Wisdom will allow a hero to see a much larger picture and allow them to recognize what truly is the problem in tense situations. Maslow also has a unique category in his hierarchy known as "Self Transcendence". The "Hero" level of the Enterprise taxonomy may fit well in this category, as Maslow suggests that at this
level, one also attains wisdom. This implies that a hero would possess both interpersonal as well as intrapersonal skills. When leadership is not enough for an organization, the enterprise desperately seeks a "Hero" or those who can think and act outside the box, which comes from creativity. Another more important characteristic of a hero is the compassion for other people. They are highly ethical and altruistic which may lead them to put people ahead of even the organizations goals.

7. THE ATTRIBUTES OF PHRONESIS

As mentioned earlier, phronesis is the attribute of an extraordinary leader (hero). The following is a practical everyday example of phronesis related to the theatre department at John Abbott College. As with any Professional Theatre Program there are safety procedures assigned to complex and dangerous tasks. All students enrolled in the JAC theatre department must take carpentry class and must demonstrate a basic level of competency with all tools. Using the table saw is one of the most daunting tasks for a new student and so there are rules in place to use it. All safe table saws will be equipped with a saw guard and the user guide will state the following safety instruction and disclaimer.

*Keep the blades' guards, spreaders and anti-kickback devices in place and operating properly. This means that if precautions are not heeded, it may result in serious injury or possibly even death.*

Students will heed the warning word for word and use the saw blade guard. The student in Figure 9 displays a complex thin cut that requires the saw guard to be out of the way because the rip fence is very close to the blade. The safety instruction demands that the saw guard stay on, but the fence is in the way so the student uses the guard in the up position to do their cut. In doing so the saw guard forces the student’s arm closer to the saw and has also blinded them from seeing what is going on in the red cutting zone.
Figure 10 displays the same cut with the saw guard off, which effectively takes the student’s arm out of harms way and visually opens up the cutting zone. Although the student in Figure 9 is technically following safety procedures, the technique is not safe. The purpose of safety rules is to reduce and avoid injuries, yet in this case following the safety rules put the student in harms way just as it would putting an innocent person in jail in the last example.

The lemonade example (described earlier) shows a legal system that is confined by the rule of law. The security guard, police officer and doctor were not free to act phronimous because of the word of the law. One would have hoped that the judge would have acted phronetically because they are arguably there to interpret the spirit of the law and not the letter of the law regardless of any circumstances. Unfortunately, these laws are in place to ensure that no matter how imprudent or unwise a practitioner of law is, the procedure set in place will convict or punish those who are child abusers. The table saw example shows what happens when a rule in place for safety but in fact contributes to the danger. The rule is in place to keep people from injuring themselves. To break this rule displays a phronimous act in support of the spirit of the safety rule.
These two examples illustrate the value of a student achieving the level of *phronesis* for practical reasons. Noel (1999) adds that *phronesis* can guide a teacher or leader in practical situations. Dunne (1993) illustrates how phronetic insight (*phronesis* and *nous* combined) can identify a problem in the classroom: “An inordinate fear of failure is preventing John from revealing his full potential in class and James is causing trouble in class because he is bored with work that’s too undemanding for him.” The leader who is unphronetic would assume that John is lazy and James is a trouble maker, but they are not the cause of the problem. The phronetic leader could reduce the challenge for John and build his confidence while gradually increasing the challenge as John gains confidence. James’ assignments could be increased in difficulty to keep him challenged and therefore productive. Using phronetic wisdom allows a leader to foster excellence in their subordinates and this is what turns them into heroes. They had the insight and wisdom to identify the problem, the will to change it and not accept the status quo and the, know how, (techne) to change it and the courage to do it.

8. SUMMARY

It is apparent that if one ascends through the stages of the taxonomy one could evolve into a better student or more valued employee. The virtues needed to ascend the taxonomy are not only desirable to an organizations’ success but are valued by society. There are a few instances where one category overlaps a step into the next category and may be an indicator of progression.

The first example of this is the two different styles of teamwork, (Chan et al., 2004; Kuech, 2004; Page & Donelan, 2003). In the *cooperative* model, team members take a limited role in responsibility for task success. They only confer with the other team members about their components or tasks. For example, they may simply divide up the tasks and report back to the group. In the *collaborative*
teamwork model, responsibility increases as vigilance increases in their task as well as other tasks. They not only consult with one another, but they trade ideas and work together to make the project cohesive. Students who perform effectively in the collaborative role might be good candidates for becoming managers. Another example of overlapping in the progression would be the leadership, which also has two levels. Evidence that there are two levels of leadership has been identified. (Bass & Hater, 1988; Podsakoff et al., 1990). In the transactional form of leadership, there is an emphasis on getting goals done via a transaction, for example, an exchange for higher marks, money or other forms of payment. In the transformational form one accomplishes goals while transforming followers who affectively transmit a sense of dedication to the quality of the project at hand and loyalty to the group.

Developmental psychologists such as Erik Erikson (1963) and Abraham Maslow (1943) offer theories that may help understand the progression students make when faced with a situation where they must work in groups. In reference to the psychosocial development that occurs in collaborative teamwork, Erikson would explain that this occurs because at this stage of development they have reached the stage of *Identity*. They have discovered themselves and have been able to successfully integrate into groups. And, Maslow theorizes that when a person reaches the fourth level of *Esteem*, they attain self-esteem and confidence to deal with fellow students; it is then possible to acquire respect from them and respect for them. This is a fundamental requirement for managers since they now need to deal interpersonally to achieve their tasks.

In reference to the psychosocial development that occurs in the emergence of leadership, Erickson would explain that this may happen when the person is able to develop close and committed intimate relationships and partnerships with people. Erickson refers to this stage as the *Intimacy* stage. The highest level of leadership is transformational leadership. Transformational leaders are those who go beyond simply establishing a transactional relationship. They want to (perhaps need to)
perform at a higher level for the good of the group. Maslow would describe such a person as having reached the level of "self-actualization".
CHAPTER THREE: RESEARCH QUESTIONS

Originally the research questions that guided this study were as follows: What qualities does a student require to evolve from solo, to team, to manager, to leader or to hero? Why are some students unable to rise to the challenge of becoming managers and eventually leaders? At what point do students organize themselves and thus become successful team members? At what point do students become good managers? Do students develop conflict management skills? Do students inspire others to become transformational leaders? Do students exercise practical wisdom (phronesis)? These questions were largely addressed in the literature review. This was very helpful in the development of the research design, and in particular, the survey.

Keeping within the paradigm of the Enterprise Taxonomy, more specific questions evolved that appeared to be more pertinent. They were:

1. Will third year students score higher in attributes of teamwork, leadership, management, and, conflict resolution than first and second year students?
2. Will third year students demonstrate more phronesis than first and second year students?
3. Will there be a difference in technical or design students when tested for phronesis?

Based on observations made over the years, the researcher suggests that there is a developmental progression that takes place over a three year period. It is expected that the first year students will be in the solo or team category, the second year students will be in the team to manager category and the third year students will be in the manager to leader category. Thus it is predicted that third year students will score higher than first and second year students in the leadership category. This hypothesis is based on the fact that third year students have had more experience and
placed in positions of leadership effectively making them more aware of safety procedures. Second year students have had more time than first years in witnessing the third years leading them and have had some experience in guiding first years through safety procedures.

The Enterprise Taxonomy captures the different developmental stages that the student might go through in their educational or professional experiences. It can be used to identify any student or worker within the enterprise of education or professional field. The five main concepts in the Enterprise Taxonomy need to be operationalized.

1-Solo

The bottom of the pyramid is occupied by one person or individuals working on a task without any collaboration or cooperation with others. As students progress through their academic careers, most of their school work is done alone. Their success depends on their dedication to each pedagogical task. However, educators want to cultivate employees and citizens who are capable of working in groups and assuming leadership roles. For a student to move from working “solo” to working in groups he/she must overcome many obstacles such as fear of embarrassing oneself.

The extent to which the student participates and learns vary, depending on a number of factors. Educational researchers (George, 1995; Robbins, 1995; Asmus & James, 2005; Page & Donelan, 2003) have studied the dynamics of group work and have identified the phenomena of “social loafing”. A fear of failure may prevent students from revealing their full potential. This may be expressed by being bored and unmotivated in class. Once these types of students join a group, their peers may realize that their contribution to the team is low and ineffective and group productivity may fall short of the estimated productivity. The reaction of the group to the social loafer may be negative which exacerbates the problem. Reasons for not participating may vary. Individuals may put forth less effort into groups because there
are others who take charge. Also, in group situations, individuals may feel as though their individual effort may be unidentifiable and that their work will go unrewarded or lack of work unpunished.

2-Team

The team is potentially the most effective way in which a group of individuals can work (Chan et al., 2004; Kuech, 2004; Page & Donelan, 2003). The purpose of an effective team is to ultimately accomplish a task using human relation skills, during a minimum amount of time while using all possible resources. Teams should be organized to promote positive development to ensure their success (Mills & Beleveau, 1999; Tuckman & Jensen, 1977). The greatest obstacle to effective team building is interpersonal conflict among team members. The best way to overcome any conflict is to become aware of one’s interpersonal conflict style and reach a balance between concern for self and others.

3-Manager

Managers are those who optimize procedures to accomplish tasks and aim for continuity and do well in situations of constant stability. They must also keep the workforce efficient and overcome any opposition, disagreements or friction that may arise from the execution of tasks (Bacal, 2004; DeChurch & Marks, 2001; Jordan & Troth, 2004). Finding the right balance between accomplishing goals and workforce contentment is vital to the success of any organization (Conerly & Tripathi, 2004).

4-Leader

Leaders are those who innovate existing procedures to maximize efficiency. They aim to be dynamic in circumstances of ambiguity and change to stay ahead (Dingle, 1997). They lead by example and exert confidence in their decisions (Cicero & Pierro, 2007; De Vries, 2000). They must also be able to transmit a sense of mission and strive to transform the workforce into people who take pride and have an
emotional stake in their tasks and ultimately the goal of the organization (Bass & Hater, 1988; Podsakoff et al., 1990; Westerman, 1994).

5-Hero

Heroes will ask what and why, rather than, how and when. They will challenge the status quo rather than accept it and take extraordinary risks even when the stakes are high. They will see and do the right thing not only do things right (Moore, 2007). They will adhere to the spirit of the law or rules rather than to the letter of the law or rules (Schwartz & Sharpe, 2006).

I predict that there will be a clear progression of success as the third year students will score higher than first and second year students in the leadership category. This hypothesis is based on the fact that third year students have had more experience and been placed in positions of leadership effectively making them more aware of safety procedures. Second year students have had more time than first years in witnessing the third years lead them and had some experience in guiding first years through safety procedures.
CHAPTER FOUR: METHODOLOGY

1. PURPOSE AND DESIGN OF STUDY

Theatre is a collaborative endeavour in the professional world that requires teamwork, but also requires that members of the team be able to manage and/or lead when necessary, while others do not.

Referring to previous studies (Bass and Avolio, 1999; Podsakoff et al., 1990) that discussed factors that foster effective teamwork, management and leadership a survey was designed by this researcher. It includes Likert-Scale items that elicit data on the participants' personality; teamwork and management experience; and, attributes of leadership. Three videos were shown to participants. They were asked to respond to the correctness or incorrectness of a technique used in theater production that was shown on the videos. This elicited information regarding the presence or absence of “responsible assertive leadership” and “phronesis”.

2. PARTICIPANTS / SAMPLING

A survey was distributed to all students of the three year Professional Theatre Program at John Abbott College. Before their second year, students must choose between specializing in the technical or design stream, and eventually they will graduate as a technician or as a designer in their third year. Technical students will learn how to make costumes, build sets, props and design sound and lights for the stage. Design students will acquire the proper skills in the areas of costume, set and prop design.

A classroom was designated to be used for data gathering in four one-hour time blocks. The first students to be administered the survey were one half of the first
year students. These were scheduled to participate during one of their theatre classes with the permission of the teacher. The next group of students were the rest of the first year students, who with permission of the same teacher were given the survey. The second year students volunteered to come in on their day off for the third block of data collecting, as did the third year students for the final block. Students who took the earlier blocks were discouraged from discussing any videos or content of the survey with students who had not yet attended the data collection session. All participants were asked to refrain from making eye contact or communicating with anyone else while filling out the survey.

Students in the first year cohort numbered 20 students of which 16 completed the survey. Of the 19 second year students, 3 design students and 10 technicians responded, totalling 13 out of 19 students. Of the 15 third year students, 8 design students and 6 technicians responded totalling 14 out of 15 students.

2.1 PROTECTION OF HUMAN SUBJECTS

Application was made to the John Abbott College Ethics Committee for ethical approval. The application included a completed form signed by the researcher and the research supervisor, an informed consent and debriefing statement, a copy of all instruments used, and a summary of the design and sample procedures used.

Students were guaranteed confidentiality throughout the research process. Students were not asked to write their names, consequently the surveys remained anonymous and the privacy of the students was respected. No electronic copies of the completed surveys were made. All data acquired from surveys were transferred to SPSS and Excel, and were stored on a password secured hard drive off campus. All completed surveys will be stored in a locked filing cabinet off campus and will be destroyed one year after project submission.
3. INSTRUMENTATION

All students in the Professional Theatre Program Design/Technical Option were administered a survey created by the researcher. Items for the survey were drawn from the surveys written by Bass and Avolio (1999) and Podsakoff et al. (1990) appearing in articles written by Webb (2007) and Masood et al. (2006). Items were designed to be suitable for the purposes of this research project. There is an advantage to using well known instruments such as these; however, there were some limitations as they were devised for the work force and not specifically for an academic setting. To compensate for this, the survey designed for this project was given to a pilot group made up of three teachers. Feedback on the operationalization of terms and modifications were made to make the meaning of the items more comprehensible to Theater Program students.

The original survey consisted of a total of 28 items. A seven-point Likert Scale was used to measure student responses. Two items tested for validity. Two open ended questions pertaining to three videos appeared at the end of the survey. Eight items were background questions eliciting information regarding the participant’s age, gender, year and stream. First year students were asked to declare a stream (design or technical) that they thought they would choose in second year. First year students were then considered to be in their respective streams according to this response for this survey. Some items dealt with personality, such as “I enjoy meeting new people” and “I am not fearful of failure.” There were team related items such as “When others are not participating I encourage them to get involved.” and “When I get into interpersonal conflicts with team members it affects my ability to produce my best product.” Some items were based on management and conflict resolution such as “I believe that everyone should have a say in decision making in team related tasks for team success” and “For a team to be effective, it is not necessary for everyone to know the role of everybody else in the team.” Some items were based on transformational leadership such as “Successful team work can be attributed to
leaders who put more emphasis on cultivating the strengths of the team members than focusing on getting the work done.”, and “If the team in under pressure to finish a task, the leader shouldn’t take the time to explain the final goal of the project, but should instead just ask the members to follow his/her directions.”

It should be noted that after the data collection, 17 items on the survey were selected for purposes of analysis. (See Appendix C for amended survey marked with asterisks.) This selection process was reached after consulting with three faculty members and the research supervisor. Some items were deemed too vague or off topic. For example item #23 “When a group is running well, the leader should not interfere.” was not asked in a specific context therefore, it could be construed in various ways. For example, one could argue that there is merit in interfering in terms of encouragement or not interfering and leaving the group alone because the leader trusts and has confidence in members of the team.

Three videos were shown to all participants of this study. All were filmed in the theatre department at John Abbott College. The first video “The Fly Floor” took place on the fly gallery (see Figure 11). A fly gallery is an elevated walkway in which a theatre technician has access to lower any of the 30 pipes above the stage down to a working height of four feet off of the floor. Confederate #1 walked down the gallery with his attention focused primarily on the ropes and purposefully away from the stage floor. He then unlocked a predetermined pipe and flew the pipe in (down towards the stage in theatre language). The camera panned to the right and above the stage to show the pipe moving down closer towards the stage. As it panned down, the camera angle revealed that there was a person (Confederate #2) on the stage sitting at a table, reading a newspaper, with his back to us. The angle of the camera was such that it created the illusion of danger by looking as though he would have been hit on the head by the unobserved pipe. Students were then simply asked “Please explain in detail what happened in the video.”
The purpose of this video was to see whether or not students noticed that confederate #1 did not follow safety procedures and were specific as to what the safety procedures are. During a setup, pipes are flown all the way to the stage floor for easy access to rig any curtains, lighting equipment or set pieces. First, all students are trained to look down to the stage to see that it is clear. Secondly, they are instructed to yell “Pipe coming in!” before starting to pull on the rope, while keeping an eye on the pipe as it is coming in to make sure that it has a clear path as it goes down. These two measures need to be heeded because the pipes can potentially injure someone as they are capable of being flown in 4 feet above the stage floor. Confederate #1 does not perform any two of these procedures. If the student noticed that the procedures were not followed and recorded this in the open-ended item, then he/she had displayed responsible assertive leadership.

![Diagram of theatre setup](image)

*Figure 11. Front Elevation of Casgrain Theatre*

The second and third videos “The Table Saw” were filmed in the theatre carpentry shop. The second video showed the researcher cutting a piece of wood measuring 1 by 6 in half, into a 1 by 3, using the table saw. He then left the guard in
place as indicated in Figure 12. The third video showed another faculty member demonstrating the same cutting procedure, but this time took off the saw guard before cutting the piece of wood as indicated in Figure 13. Students were first asked to decide which method was the correct procedure. Students were then instructed “Give specific reasons why you would choose either preference.”

<table>
<thead>
<tr>
<th>Video number 2</th>
<th>Video number 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saw Guard</td>
<td>Saw Guard Absent</td>
</tr>
<tr>
<td>Saw blade</td>
<td>Saw blade</td>
</tr>
</tbody>
</table>

*Figure 12. Following Safety Rules*
*Figure 13. Breaking Safety Rules*

Note how close the faculty member’s arm is to the blade.

Note how far away the faculty member’s arm is to the blade.

4. PROCEDURES

Students entering the classroom were asked to take a seat and wait for the rest of their classmates to arrive. The researcher provided four boxes of doughnuts, one box for each of the four groups of students to enjoy and put them at ease. The first document distributed to students was the consent form (Appendix D) which was filled out during the session. There were six under age students who were given the consent form one week prior to the data collection day so that they could have a parent or legal guardian sign the document and return it in time for the data collection
session. Out of the six under age students, five returned their forms signed. The one student who did not bring the form signed was asked to sit quietly until the session was over. Once all consent forms were handed in, the surveys were given out to students. When students reached item 28, they were asked to wait until all students finished so that the video portion of the survey could begin. Video number one, "The Fly Floor" was shown twice; students were then given time to finish writing their answers. Once students were finished, they were shown video number two and three "The Table Saw" twice each. Then they were asked to answer the questions in response to the table saw video. Once students were finished, they were permitted to leave. All four groups had more than enough time to complete the survey.

5. DATA ANALYSIS

The nature of the data was quantitative and the software used to analyze the data was SPSS and Excel. The data was analyzed by using descriptive statistics. This enabled a comparison of the means of years 1, 2 and 3 with respect to personality, teamwork, management resolution, transformational leadership, responsible assertive leadership and phronesis.

The written open ended responses collected from "The Fly Floor" video were coded into the following four categories. To receive a “one”, students would have simply explained what happened in the video. A “two” was assigned to students who mentioned that it was unsafe but did not give specific reasons why it was so. An evaluation of “three” was given to students who stated that it was a safety issue with one recommendation, either calling out that a pipe was coming in or looking towards the stage. A “four” was for those who stated that it was a safety issue with both of the recommendations, calling out that a pipe was coming in and looking towards the stage.
The written open ended responses collected from “The Table Saw” video were coded into the following four categories. Responses were coded as a “one” if the student chose the wrong method. If students chose the right method but did not mention the safety reasons, they were classified as a “two”. If students chose the right method but mentioned that it was for safety but did not mention the safety paradox, the response was rated as a “three”. The best responses rated as a “four” were for students who chose the right method and that mentioned the safety paradox that going against the manufacturers recommendations, was the correct way to proceed.
CHAPTER FIVE: RESULTS

Data collected from a total of 43 students (16 first year, 13 second year and 14 third year students) were analyzed by comparing the average response by year for the following categories of attributes: Personality, Team, Management and Conflict Resolution, Transformational Leadership (Table 1), Responsible Assertive Leadership and Phronesis (Table 2). Refer to Appendix A for the wording of each item. The Likert Scale went from 1 (strongly agree) to 7 (strongly disagree).
Table 1  
Mean per Item per Year

<table>
<thead>
<tr>
<th></th>
<th>1st Year (N=16)</th>
<th>2nd Year (N=13)</th>
<th>3rd Year (N=14)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Personality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#26</td>
<td>1.69</td>
<td>1.54</td>
<td>2.07</td>
</tr>
<tr>
<td>#27</td>
<td>3.88</td>
<td>3.46</td>
<td>4.29</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#28</td>
<td>4.19</td>
<td>4.23</td>
<td>3.5</td>
</tr>
<tr>
<td>Summary</td>
<td>3.25</td>
<td>3.08</td>
<td>3.29</td>
</tr>
<tr>
<td>Team</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#9</td>
<td>1.69</td>
<td>1.54</td>
<td>2.07</td>
</tr>
<tr>
<td>#10</td>
<td>1.81</td>
<td>2.15</td>
<td>2.29</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#14</td>
<td>4.88</td>
<td>5</td>
<td>5.07</td>
</tr>
<tr>
<td>#19</td>
<td>2.06</td>
<td>1.77</td>
<td>1.71</td>
</tr>
<tr>
<td>Summary</td>
<td>3.16</td>
<td>3.10</td>
<td>3.34</td>
</tr>
<tr>
<td>Management and Conflict Resolution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#11</td>
<td>1.94</td>
<td>1.92</td>
<td>1.71</td>
</tr>
<tr>
<td>#12</td>
<td>3.38</td>
<td>3.31</td>
<td>2.71</td>
</tr>
<tr>
<td>#13</td>
<td>2</td>
<td>2.46</td>
<td>2.14</td>
</tr>
<tr>
<td>#15</td>
<td>1.94</td>
<td>1.69</td>
<td>1.64</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#16</td>
<td>2.31</td>
<td>2.62</td>
<td>2.57</td>
</tr>
<tr>
<td>Summary</td>
<td>2.31</td>
<td>2.4</td>
<td>2.16</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#20</td>
<td>2.94</td>
<td>2.69</td>
<td>2.21</td>
</tr>
<tr>
<td>#21</td>
<td>2.75</td>
<td>2.77</td>
<td>3.29</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#22</td>
<td>3.5</td>
<td>4.08</td>
<td>3.43</td>
</tr>
<tr>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#24</td>
<td>4.38</td>
<td>3.77</td>
<td>4.71</td>
</tr>
<tr>
<td>#25</td>
<td>3</td>
<td>2.85</td>
<td>3.36</td>
</tr>
<tr>
<td>Summary</td>
<td>3.31</td>
<td>3.23</td>
<td>3.4</td>
</tr>
</tbody>
</table>

*To keep consistency in data recording, the values assigned in this item were reversed to keep the Likert Scale consistent with the favourable outcome being number one.
Table 2
Mean per Item by Stream

<table>
<thead>
<tr>
<th></th>
<th>1st Year (N=16)</th>
<th>2nd Year (N=13)</th>
<th>3rd Year (N=14)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responsible Assertive Leadership #29</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design/Tech</td>
<td>2.31</td>
<td>3.23</td>
<td>3.36</td>
</tr>
<tr>
<td>Design Only</td>
<td>2.57</td>
<td>2.67</td>
<td>3.38</td>
</tr>
<tr>
<td>Tech Only</td>
<td>2.11</td>
<td>3.4</td>
<td>3.33</td>
</tr>
<tr>
<td><strong>Phronesis #32</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design/Tech</td>
<td>3.06</td>
<td>3.31</td>
<td>3.43</td>
</tr>
<tr>
<td>Design Only</td>
<td>3</td>
<td>3</td>
<td>3.12</td>
</tr>
<tr>
<td>Tech Only</td>
<td>3.11</td>
<td>3.4</td>
<td>3.83</td>
</tr>
</tbody>
</table>

Tables 3 and 4 illustrate open ended responses collected from “The Fly Floor” video comparing two grouping factors: year (1, 2 and 3) and stream (design/technical) for the frequency of correct answers only. Students were asked “Please explain in detail what happened in the video.”

Table 3
Comparison of Frequencies for First, Second and Third Year Technical and Design Students for Correctly Answering Item #29, which Demonstrates Responsible Assertive Leadership

<table>
<thead>
<tr>
<th></th>
<th>First Year (N=16)</th>
<th>Second Year (N=13)</th>
<th>Third Year (N=14)</th>
<th>Total (N=43)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>43%</td>
<td>14%</td>
<td>43%</td>
<td>18</td>
</tr>
<tr>
<td>Technical</td>
<td>20%</td>
<td>50%</td>
<td>30%</td>
<td>25</td>
</tr>
</tbody>
</table>

To obtain the frequencies for Table 3, the correct answers were collapsed; i.e. responses “1-3” were considered wrongly answered while only response “4” was considered correctly answered.

The chi-square test did not show a significant association between stream (design versus technical) and answers (wrongly versus correctly answered item #29) (chi-square with one degree of freedom = 0.021, p = 0.885) (Table 4).
The open ended responses collected from “The Table Saw” video compared two grouping factors: year (1, 2 and 3) and stream (design/technical) for the frequency of correct answers only. To obtain the frequencies for Table 5, the correct answers were collapsed; i.e. responses “1-3” were considered wrongly answered while only response “4” was considered correctly answered.

A chi square was done to compare stream (design/technical) and answers (wrongly answered/correctly answered) (Table 6). The chi-square test shows a significant association between stream (design versus technical) and answers (wrongly versus correctly answered item #32) (chi-square with one degree of freedom = 5.214, p = 0.022) (Table 6).
CHAPTER SIX: DISCUSSION

1. ATTRIBUTES

1.1 PERSONALITY (SOLO)

Three background personality items were asked such as #26 “I enjoy meeting new people”, #27 “I am not fearful of failure” and #28 “Sometimes, I feel defeated by a difficult assignment.” From the results it may be possible to assume that students who go into the program generally enjoy meeting new people. It is interesting to note that third year students have a greater fear of failure. This could be attributed to third year students being tested rigorously in leadership positions or difficult tasks and therefore know what it is to be tested.

The items were designed to measure student personalities in terms of dedication to their work and desire to meet new people. Since most of their school work is done alone, their success depends on their dedication to each pedagogical task and the ability to overcome many obstacles such as fear and acceptance (George, 1995; Robbins, 1995). The overall means of the combined three items were 3.25 ±1.984 for first year students, 3.0769 ±1.9383 for second year students and 3.2857 ±1.7006 for third year students. Thus, there were no significant differences when first, second and third year students were compared.

1.2 TEAM

Four team-related items were included in the survey, for example, #9 “When I get into interpersonal conflicts with team members it affects my ability to produce my best product.” Most students disagreed with a mean on the Likert Scale of 3.875 ±1.19 in first year, 3.4615 ±0.66 in second year and 4.2857 ±0.99 in third year,
indicating that for the three years, the student responses ranged between somewhat disagree to neutral. When responding to #10 “When others are not participating I encourage them to get involved”, students all seemed to agree, with a mean ranging between $1.1813 \pm 0.65$ in first year and $2.2857 \pm 1.069$ in third year. The results from item #14 “When working in a team I avoid conflicts and keep my problems to myself.”, shows that students somewhat agree and keep their problems to themselves instead of disclosing them to members. The mean on the Likert Scale was $4.875 \pm 1.2583$ for first year students to $5.0714 \pm 1.4917$ for third year students. For item #19 “I like to be on a team where people take pride in their work regardless of the mark.”, the responses of $2.0625 \pm 0.6801$ from first year students to $1.7143 \pm 0.7263$ third year students seem to indicate that students agree and almost strongly agree that pride in their work is more important than marks.

The four items asked were designed to measure team awareness and desire to foster team spirit. Theatre is inherently a team-oriented endeavour, because many other enterprises are as well, several studies have looked at how groups are managed in such a way as to promote positive development and have identified some revealing styles of interpersonal conflict development (Mills & Beleveau, 1999; Tuckman & Jensen, 1977). The overall means of the combined four items were $3.1563 \pm 1.7295$ for first year students, $3.0962 \pm 1.5998$ for second year students and $3.3393 \pm 1.8318$ for third year students. There were, however, no significant differences when comparing first, second and third year students and the hypothesis that third year students would show more teamwork abilities was not supported.

1.3 MANAGEMENT AND CONFLICT RESOLUTION

Five management conflict resolution-related items were posed such as item #11 “When I see my team is having difficulty doing the task, and I know the solution, I take the leadership role.” First year students at a mean of $1.9375 \pm 0.5737$ and second year students at $1.9231 \pm 0.8623$ tend to take the leadership role at a slightly
lower rate than the third year students with a mean of 1.7143 ±0.6112. For item #12 “When there are conflicts in the group, I bring them into the open and try and address the problems directly.”, the third year students seem more likely to agree than first year students who have a mean of 3.375 ±1.6279, the second year students a mean of 3.3077 ±1.3156 while third year students would tend to more likely agree with a mean of 2.7143 ±0.9945. Item #13 “When I’m working with a group, I can tell the difference between constructive communication and chit chat between team members.” First year students responded with a mean of 2 ±0.8165, second year students, 2.4615 ±1.1983 and the third year students with 2.1429 ±0.9493. All students agreeing that they could tell the difference. Item #15 “I believe that everyone should have a say in decision making in team related tasks for team success.”, received a response of 1.9375 ±1.0626 from first year students, 1.6923 ±0.6304 from second year students and 1.6429 ±0.8419, which translates into a resounding “agree” from all years. The last item #16 “For a team to be effective, it is not necessary for everyone to know the role of everybody else in the team.”, averaged a response of disagree to somewhat disagree with the first year students scoring a mean of 2.3125 ±1.1955, the second year students at 2.6154 ±1.4456 and the third year students scored 2.5714 ±1.2839.

The five items asked were designed to measure management and conflict resolution awareness among students. Students are often assigned to manage groups and need to maintain efficiency and quickly resolve any conflict that may arise to accomplish team goals (Bacal, 2004). Many studies (Conerly & Tripathi, 2004; DeChurch & Marks, 2001; Jordan & Troth, 2004) are not only concerned with the goals and success of the organization but with the maintenance of the relationships within groups to maintain group cohesion through long-term relationships. The overall means of the combined five items were 2.3125 ±1.2179 for first year students, 2.4 ±1.2349 for second year students and 2.1571 ±1.0305 for third year students. Thus, there were no significant differences when comparing first, second and third
year students and the hypothesis that third year students would show more management and conflict resolution abilities was not supported.

1.4 TRANSFORMATIONAL LEADERSHIP

Five transformational leadership related items were presented such as item #20 “Successful team work can be attributed to leaders who put more emphasis on cultivating the strengths of the team members than focusing on getting the work done.” Responses from students were 2.9375 ±1.1815, 2.6923 ±0.8549 and 2.2143 ±0.975 from first, second and third year students respectively. Item #21 “Team leaders of a group project for a course should choose members who are more concerned with what the group achieves than getting high marks.”, displayed a slight increasing trend from 2.75 ±0.9309 for first year students and 2.7692 ±1.4806 for second year students to a slight increase for third year students at 3.2857 ±1.3828. Item #22 “If the team in under pressure to finish a task, the leader shouldn’t take the time to explain the final goal of the project, but should instead just ask the members to follow his/her directions.”, indicated a general trend that all years were more likely to somewhat agree to being neutral. Item #24 “Team leaders should have the final say when the project is acceptable.”, also scored 4.375 ±1.9621 for first year students, 3.7692 ±1.3634 for second and 4.7143 ±1.6375 for third year students. For item #25 “It is more beneficial to reward people by inspiring them to do their best than to reward them with tangible things, such as money, food, or gifts.”, responses were 3 ±1.3663 for first year students, 2.8462 ±1.4051 for second year students and 3.3571 ±1.3927 for third year students.

The five items asked were designed to measure transformational leadership behaviours among students. Students often need to take a leadership role when they are in charge of a group consisting of their peers. The effectiveness of the transformational leader has been praised in many studies as the most effective style of leadership for assured success and lasting dedication of the followers (Kezar, 1998; Podsakoff et al., 1990). There are specific behaviours that are essential to attain
transformational leadership qualities (Moore, 2007; Westerman, 1994; Bass & Hater, 1988; De Vries, 2000), such as an ability to transmit a sense of mission and strive to transform the workforce into people who take pride and have an emotional stake in their tasks and ultimately the goal of the organization. The overall means of the combined five items were 3.3125 ±1.5719 for first year students, 3.2308 ±1.4336 for second year students and 3.4 ±1.5825 for third year students. There were, however, no significant differences when comparing first, second and third year students and the hypothesis that third year students would show more transformational leadership behaviours was not supported.

1.5 PHRONESIS

Students were shown two videos and were asked open-ended questions. Their responses (correct or incorrect) would be used to determine whether or not the student demonstrated phronesis. The video demonstrating the dangerous misuse of a pipe (fly floor video) shows students a situational crisis. When students see that there is a danger they must be assertive and take responsibility for everyone's safety by first noticing it and then acting on it, in this case stating it. Students were asked “Please explain in detail what happened in the video.” Similarly, videos demonstrating the use of a table saw were shown. Responses to a similar question were analyzed in an attempt to see if phronesis was evident.

1.5.1 Responsible Assertive Leadership Demonstrating Phronesis

1.5.1.1 Comparison of Responses of First Year, Second Year and Third Year Students to Fly floor Video.

The responses were coded based on a 4 point scale, with 4 being the most correct answer. Means were calculated. Results were 2.3125 ±1.3525 for first year students, 3.2308 ±0.9268 for second year students and 3.3571 ±0.6333 for third year students. There were no apparent differences when comparing first, second and third year students and the hypothesis that third year students would show more
responsible assertive leadership behaviour was not supported. Below are two examples of responses.

A third year technician coded as a “four” wrote:

“Pete was checking each line set to see which was the right one. Once he found the correct one he began to bring it in. As he is bringing it in, we see Chris sitting on stage unaware that a pipe is being lowered right above his head. If Pete had followed proper procedure and yelled out to say that he was bringing it in and checked to make sure no one was in the way he would have known that Chris was in the way and could potentially get hurt.”

A first year designer coded as a “one” wrote:

“Peter was wearing a red shirt and black pants. At first he is looking up and several dozen vertical ropes which are locked in place. Peter checks two ropes, seeing if they are secure or checking whether they are the ropes they are looking for. Then he goes to a third rope, unlocks it and starts pulling it down toward himself. As he does this in the right wing of the stage, the camera shifts to on-stage where someone is sitting on a chair facing left-wing with his feet on the table and he is reading a newspaper. As he is reading, a rod suspended by two strings is being lowered and looks as though it will hit the man with the newspaper in the head.”

The third year student that was coded as a “four” described the scene with accurate theatrical terms, in contrast to the first year student that did not. He used the term “line set” instead of the first year student’s use of “vertical ropes”. The third year student describes the pipe as being brought “in” rather than the first year student referring to the action as “pulling it down”. The third year student refers to the object being lowered as a “pipe” while the first year student refers to it as a “rod suspended by two strings”. It is in fact a pipe suspended with five aircraft cables. This seems to demonstrate that some first year students, although taught about the fly floor, did not fully absorb the terms and therefore possibly the safety procedures.

The first year student has written more but has concentrated on detail rather than the important point of safety, thus meriting a coding of “one”. The third year student’s approach is concise and focuses instead on the safety aspect. He is coded as
a “four” because he observed the video and criticized the line operator or confederate #1 (Peter) for not specifically yelling out and looking on stage. The proper use of theatrical terms and the instinct to point out safety violations probably came with time and experience.

1.5.1.2 Comparison of Responses of Design and Technical students to the Fly Floor Video.

The data was then analysed comparing designers and technicians with the assumption that the technicians would perform better. The data was collapsed into two categories, category “four”, those who mentioned that there were safety violations and gave two recommendations and the rest of the answers were considered wrong; i.e. category “one”. A chi-square was then performed comparing students of the design stream to the students of the technical stream. The chi-square test did not show a significant association between stream (design versus technical) and answers (wrongly versus correctly answered item #29) (chi-square with one degree of freedom = 0.021, p = 0.885). The research hypothesis that “differences in stream of study with respect to correctly answered items” are related to differences in “year” is not supported by this analysis. The findings may indicate that although students may know how to use the fly floor they possibly do not feel the need to enforce the safety regulations if they are present.

The two videos demonstrating contradictory uses of the table saw presented the students with a dilemma. Schwartz and Sharpe (2006) confirm that practical wisdom is the master virtue essential to solving problems and that it is increasingly difficult to nurture and display in modern society. Will students adhere to the spirit of the law by using phronesis to use the table saw safely by removing the saw guard or will they obey the manufacturers’ instructions to the letter of the law and use the saw guard? Students were asked “Give specific reasons why you would choose either preference.”

1.5.2 Phronesis Related to the Use of a Table Saw
1.5.2.1  Comparison of Responses of First Year, Second Year and Third Year Students.

The responses were coded based on a 4 point scale, with 4 being the most correct answer. Means were calculated to compare students from first, second and third years with the assumption that third year students would perform better than the rest. The results were 3.0625 ±1.3401 for first year students, 3.3077 ±1.3156 for second year students and 3.4286 ±1.0894 for third year students. Although the second and third year technical students did slightly better, the first year students did not.

A second year technician who coded as a “four” wrote:

“When Pierre kept the guard on his arm got way too close to the blade and could have caused an injury. When Peter took off the guard his arm was not as close to the blade so the risk of injury was way less. I don’t want to risk getting hurt because the manufacturers didn’t think the guard through properly.”

In contrast a second year designer who coded as a “one” wrote:

“Because the table saw is super scary for me and I would feel safer following all the instructions gave by the manufacturer.”

The second year technical student who was coded as a “four” because he described the scene as being dangerous and accused the manufacturer of being negligent, that they did not think the guard through properly. The second year designer described the table saw as scary and we can probably assume that he meant that it is always scary to him. This perception of the table saw always being scary may have an effect of blindly following every safety procedure even though they are more dangerous. It is possible that perceived danger sometimes hinders our judgment.

1.5.2.2  Comparison of Responses of Design and Technical students.

The data was then analysed comparing designers and technicians with the hypothesis that the technicians would fare better. The data was collapsed into two categories, category “four”, those who chose the right method and mentioned the
safety paradox and the rest of the answers were considered wrong; i.e. category “one”. A chi-square was then performed comparing students of the design stream to the students of the technical stream. The chi-square test showed a significant association between stream (design versus technical) and answers (wrongly versus correctly answered item #32) (chi-square with one degree of freedom = 5.214, p = 0.022). The research hypothesis that “differences in stream of study with respect to correctly answered items” are related to differences in “year” is supported by this analysis. This suggests that technicians demonstrated more practical wisdom (phronesis) than designers. Since technicians use the table saw more often than designers it could be that experience is playing a role in desirable outcome more than practical wisdom.
CHAPTER SEVEN: CONCLUSION

1. CONCLUSION

The focus of this research study was to ascertain the applicability of the Enterprise Taxonomy (seen in Figure 1) to students in John Abbott College's Theatre Production Program. It is assumed that students ascend through the Enterprise taxonomy over their three years in the program.

As students progress through their academic career, most of their school work is done alone and it is expected that their success depends on their dedication to each pedagogical task. This is their first step to working “solo” in the taxonomy, to the next step working with groups of people in “teams”. The works of George (1995), Robbins (1995), Asmus and James (2005), Page and Donelan (2003) examined the obstacles a student may encounter from realizing their full potential as a socially developed individual.

The second stage is reached once individuals successfully contribute to a team. Members should be organized to promote team-building positive development to ensure their success (Mills & Beleveau, 1999; Tuckman & Jensen, 1977) and be aware of obstacles such as interpersonal conflicts among team members.

The third stage is successfully attained when students display abilities to manage by keeping the workforce efficient and overcome any opposition, disagreements or friction that may arise from the execution of tasks (Bacal, 2004; DeChurch & Marks, 2001; Jordan & Troth, 2004). Finding the right balance between accomplishing goals and workforce contentment is vital to the success of any organization (Conerly & Tripathi, 2004).

The fourth level of the Enterprise taxonomy is achieved when individuals exhibit the favourable qualities of a good leader. Leaders, lead by example and exert confidence in
their decisions (Cicero & Pierro, 2007; De Vries, 2000). They must also be able to transmit a sense of mission and strive to transform the workforce into people who take pride and have an emotional stake in their tasks and ultimately the goal of the organization (Bass & Hater, 1988; Podsakoff et al., 1990; Westerman, 1994).

The first research question was “Will third year students score higher in attributes of teamwork, leadership, management and, conflict resolution than first and second year students?” It was found that third year students did not display more attributes of teamwork, leadership, management and, conflict resolution than first and second year students, as was hypothesized. This was disappointing. The data suggests, however, that the students of the Professional Theatre program overall do possess strong social and teamwork attributes, conflict management skills and transformational leadership qualities. It is very possible that they have these attributes at a higher level than students from other programs because it is known that theatre is a team oriented field and therefore the program attracts these types of students.

The second and third research questions were “Will third year students demonstrate more phronesis than first and second year students?” and “Will there be a difference in technical or design students when tested for phronesis?” The researcher wanted to ascertain if students possessed practical wisdom (phronesis), the fifth level of the Enterprise taxonomy.

Those who are heroes, according to the top level of the taxonomy, and those who possess practical wisdom will challenge the status quo rather than accept it and take extraordinary risks even when the stakes are high. They will see and do the right thing, not only do things right (Moore, 2007). They will adhere to the spirit of the law or rules, rather than to the letter of the law or rules (Schwartz & Sharpe 2006).

The data showed a significant association between students in the design stream versus students in the technical stream, regardless of what year they are in. In other words,
technicians demonstrated more practical wisdom (phronesis) than designers. Since technicians use the table saw more often than designers, it could be that experience is playing a role in a desirable outcome more than practical wisdom. Results, therefore, could be inconclusive in terms of making inferences about displaying practical wisdom since there was a relationship between experience and the proper use of the table saw.

2. LIMITS OF THE STUDY

There are some limitations of this study that should be mentioned. It is widely believed that longitudinal studies are more effective in studying the development of subjects over a period of time. This study analyzed three years of students and collected data from their responses per year. With such a small sample size it would have been more effective to conduct a longitudinal study following one cohort over a three year period. With such data, general inferences of student changes by experience could be made more reliably. A cross-sectional study comparing the results from this study with another three year career program and/or a two year pre-university program could present some interesting data in terms of comparing levels of leadership attributes. Another cross-sectional study comparing university theatre students to college level students would shed some insight into differences of maturity levels throughout the developmental stages established in the Enterprise taxonomy. Due to time limitations this was impossible but would be recommended for future studies.

In retrospect, there was one omission that could have been included in the survey. The open ended responses in the video “The Fly Floor” should have been compared with a Likert question such as “When other people are engaged in an unsafe act, do you point out the danger to them?” The comparison of their response to this question and their open ended question would have been very insightful. This would have also been more reliable because self-reporting would not have been the sole measure of validity of the research data. Most of the data that was gathered was self reported and may have been unreliable.
based on the common practice of subjects responding to questions according to what they believe the researcher wants to see, and not their own self reflection.

3. RECOMMENDATIONS

There are many programs in the College system that require students to work in teams, manage other students and effectively lead their peers. Few programs offer a course in developing interpersonal skills, how to contribute successfully to a team, exploring different management styles and discovering effective leadership skills. Developing effective instructional strategies around existing curriculum may be the key to introduce students to these ideas while accomplishing course requirements. Faculty members may not have considered the advantages of exploring interpersonal skills in conjunction with course content. It is anticipated that this study may benefit both students and teachers.

Other professions have also been criticized for not expending time and energy on the development of the human interaction side of the profession in their curriculums. For example, some medical doctors have often been criticised as having no bedside manners. This is because the medical profession, as are many educational programs, is designed around what to do and not how to do it, for example, in situations of disclosure of sensitive information to patients. Doctors are taught how to treat patients but there are no classes on how to talk to the patient. Students of the professional theatre program are being taught the content pertinent to the discipline but like other team-based, peer-leadership programs, no leadership classes are offered. Management and leadership are tangible qualities that need to be taught because many people are not natural born leaders. The medical profession has steered through this problem. In order to address the lack of interpersonal relationship skills in the curriculum they add another source of instructional strategy to the formal curriculum known as the “informal” or “hidden curriculum” (Hafferty & Hafler, 2011). The hidden curriculum includes any valuable instruction or behaviour that is disseminated from teacher to student outside of the formal curriculum. It most often is based on the educator’s experience and is related to the “how to” execute tasks in the hands-on portion of a class. In
our case, it is related to interpersonal team oriented tasks or managerial and leadership guidance that require human relation skills.

The recommendations to be offered from the results of this study include the use of a new instructional strategy that allows for teaching of management and leadership qualities in parallel during the task oriented session of the class. For example, if a third year student leader needs to transmit to the team of students what is to be done, the teachers need to observe how it is communicated to the students. A discussion can then ensue between teacher and student leader as to the effectiveness of various strategies. This type of instruction is known as modeling, and is one of the instructional strategies of the informal curriculum (Fryer-Edwards, 2002). Advocates of this type of strategy propose that all educators should focus their attention on the hidden curriculum or the learning that happens outside of the formal classroom. Using this instructional strategy, all aspects of the real world would be in place such as: a division of labour between workforce and leaders, a real goal of constructing a set and imminent deadlines as in opening night. All interactions between students are real with stakes and consequences, rewards and punishments, celebrations and sorrows.

The addition of leadership classes taught in a lecture format within the formal curriculum, would not only prove to be too much to an already heavily burdened curriculum, but would also possibly not be as effective as students practicing leadership in actual situations with their fellow students. It is also pointed out by Fryer-Edwards (2002), that it must be relevant and visible to be effective and that lecture-based instruction has a minimal effect in comparison. The hidden curriculum offers all the benefits of learning and applying without the burdens of disconnected lectures, time constraints and budgets. It also offers students a reflective process upon which they can improve and modify their approach with fellow students if necessary.
BIBLIOGRAPHICAL REFERENCES


APPENDIX A:
SURVEY
APPENDIX A: SURVEY

Survey

This survey was developed to explore student development in the Professional Theatre Program. Your input and cooperation will be greatly appreciated and will serve to improve the training and education of future students.

Do not put your name on the survey. The data gathered will be anonymous and confidential and will be kept locked at all times.

Please answer all questions. If you have any questions, please ask the researcher for assistance. Please refrain from making eye contact or communicating with anyone else while filling out the survey.

1. What year are you in the Professional Theatre Program? 1 □  2 □  3 □

2. Which stream are you in? If you are in first year which stream do you think that you are going into next year? Design □ Technical □

3. What is your age? ______

4. Are you Male □ Female □

5. Did you join the program right after high school? Yes □ No □

6. Are you working part time or full time outside of the school while registered in this program? Yes □ No □

7. Thinking back to our department shows, on average how much extra time did you volunteer (outside of class time) to help with the production?

<table>
<thead>
<tr>
<th>Zero hours</th>
<th>1 to 2 hours/month</th>
<th>3 to 4 hours/week</th>
<th>5 to 10 hours/week</th>
<th>10 to 15 hours/week</th>
<th>15 to 20 hours/week</th>
<th>More than 20 hours/week</th>
</tr>
</thead>
<tbody>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Have you ever been in a situation where you led a group (formally or informally) of peers in team sports, summer camp, high school projects, group work in CEGEP etcetera?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The next few questions will be asking about your experience as a member of a group where an important task must be done. The task could be a school assignment, participating in a fundraising event, being part of a play, preparing for a game, etc..

8. When I see my team members are doing well, I don't join in.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. *When I get into interpersonal conflicts with team members it affects my ability to produce my best product.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. *When others are not participating I encourage them to get involved.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. *When I see my team is having difficulty doing the task, and I know the solution, I take the leadership role.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. *When there are conflicts in the group, I bring them into the open and try and address the problems directly.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. *When I’m working with a group, I can tell the difference between constructive communication and chit chat between team members.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. *When working in a team I avoid conflicts and keep my problems to myself.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. *I believe that everyone should have a say in decision making in team related tasks for team success.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. *For a team to be effective, it is not necessary for everyone to know the role of everybody else in the team.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17. I believe that everyone should have a say in decision making in team related tasks for team success.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. For a team to be effective, it is not necessary for everyone to know the role of everybody else in the team.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. *I like to be on a team where people take pride in their work regardless of the mark.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. *Successful team work can be attributed to leaders who put more emphasis on cultivating the strengths of the team members than focusing on getting the work done.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

21. *Team leaders of a group project for a course should choose members who are more concerned with what the group achieves than getting high marks.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
22. *If the team in under pressure to finish a task, the leader shouldn’t take the
time to explain the final goal of the project, but should instead just ask the
members to follow his/her directions.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>□</td>
<td></td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

23. When a group is running well, the leader should not interfere.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>□</td>
<td></td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

24. *Team leaders should have the final say when the project is acceptable.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>□</td>
<td></td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

25. *It is more beneficial to reward people by inspiring them to do their best than
to reward them with tangible things, such as money, food, or gifts.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>□</td>
<td></td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

26. *I enjoy meeting new people.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>□</td>
<td></td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>
27. *I am not fearful of failure

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

28. *Sometimes I feel defeated by a difficult assignment and am not able to complete it.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Neutral</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

* Represents questions that were used in the amended survey for analysis.
Questions on Videos

Thank you for taking part in our survey. It is very important that you answer both questions. If you have any questions, please ask the researcher for assistance. Please refrain from making eye contact or communicating with anyone else during the video.

1. Video number one, The Fly Floor.

Please explain in detail what happened in the video. Use the back portion of this page if more room is needed.
2. Video number two and three The Table Saw.

Please state how much experience you have had with table saws.

<table>
<thead>
<tr>
<th>Virgin</th>
<th>Newbie</th>
<th>Novice</th>
<th>Intermediate</th>
<th>Advanced</th>
<th>Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never used one</td>
<td>I tried it once or twice</td>
<td>Between 3 and a dozen times</td>
<td>More than a dozen times</td>
<td>I lost count it's so many</td>
<td>I am an Expert</td>
</tr>
</tbody>
</table>

The second video shows Pierre adheres to the manufacturer’s safety recommendation and keeps the guard in place as the manufacturer stipulates...

*Keep the blades' guards, spreaders and anti-kickback devices in place and operating properly. This means that if precautions are not heeded, it may result in serious injury or possibly even death.*

The third video shows Peter explaining how to use the table saw properly, but removes the guard because it is in his way, against the manufacturer’s safety recommendation.

You must choose one of the two methods, Pierre’s way with the guard in place or Peter’s way with the guard removed. Please check one of the boxes below.

<table>
<thead>
<tr>
<th>I choose the first method used in video #2, the way that Pierre used the table saw.</th>
<th>I choose the second method used in video #3, the way that Peter used the table saw.</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Give specific reasons why you would choose either preference. Use the back portion of this page if more room is needed.
APPENDIX B: CONSENT FORM

Title of the project
Exploring Teamwork and Leadership in the Classroom

Consent Form

<table>
<thead>
<tr>
<th>Researcher:</th>
<th>Pierre Dussol</th>
<th>Tel:</th>
<th>514-803-8774</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email address:</td>
<td><a href="mailto:Pierre.dussol@johnabbott.qc.ca">Pierre.dussol@johnabbott.qc.ca</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dept /Affiliation:</td>
<td>Professional Theatre Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor:</td>
<td>Carolyn Dellah</td>
<td>Tel:</td>
<td>450-678-6010</td>
</tr>
</tbody>
</table>

Purpose of the research:

The aim of this study is to explore student development in the Professional Theatre Program and help improve the learning process. Your input and cooperation will be greatly appreciated and will serve to improve the training and education of future students.

What is involved in participating?

To participate, you will be asked to fill out a survey. Once this is done you will start the video portion of the study in which you will watch 3 videos and write an observation about them. The total time needed for the study will be 45 minutes.

Your participation in the study is voluntary, and you may choose to withdraw at anytime. Participation, or lack of participation, in this research will NOT affect your grades in any way. Your identity will remain anonymous and all appropriate measures to ensure the confidentiality of any information about you will remain confidential. Because you will not be asked to put your name or student number anonymity is guaranteed. Your name will not appear on any report or presentation that may arise from this study. This also applies to future publications the researcher might produce. All data gathered during the study will be locked in a secure place off campus and will be destroyed after the completion of the research. No electric copies of the completed surveys will be made. All data acquired from surveys will be transferred to SPSS and will also be erased one year after the submission of the project.

Data will be stored on a password secured hard drive off campus and erased one year after project submission. All completed surveys will be stored in a locked filing cabinet off campus and will be destroyed one year after project submission.
Student's signature:

STUDENTS: please tick the appropriate box, sign, date and return to ...

☐ I have read and understood the information provided on the consent form, and I agree to participate in this study. I understand that my participation is voluntary, I may withdraw from participation at any time, and my academic standing will NOT be affected in any way by consenting or not consenting to participate in this study.

☐ I do not consent to participate in the described study.

Student's name (print):

First name, Last name

Student's signature: _______________________________ Date: ____________

signature dd / mm / yyyy

Researcher’s signature: _______________________________ Date: ____________

signature dd / mm / yyyy

IF STUDENT IS UNDER THE AGE OF 18, PLEASE FILL
Take this form home and ask a parent or legal guardian to fill it out.: Please return this form at the next class.

☐ I have read and understood the information provided on the consent form, and I agree that my daughter or son may participate in this study. I understand that their participation is voluntary, they may withdraw from participation at any time, and their academic standing will NOT be affected in any way by consenting or not consenting to participate in this study.

☐ I do not consent for my daughter or son to participate in the described study.

Parent's or legal guardian's name (print):

First name, Last name

Parent’s or legal guardian’s signature: _______________________________ Date: ____________

signature dd / mm / yyyy

Researcher’s signature: _______________________________ Date: ____________

signature dd / mm / yyyy
APPENDIX C
MEAN AND STANDARD DEVIATION PER ITEM BY YEAR
APPENDIX C: MEAN AND STANDARD DEVIATION PER ITEM BY YEAR

<table>
<thead>
<tr>
<th></th>
<th>1st Year (N= 16)</th>
<th>2nd Year (N= 13)</th>
<th>3rd Year (N= 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td><strong>Personality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#26</td>
<td>1.6875</td>
<td>1.1955</td>
<td>1.5385</td>
</tr>
<tr>
<td>#27</td>
<td>3.875</td>
<td>1.9279</td>
<td>3.4615</td>
</tr>
<tr>
<td>*</td>
<td>4.1875</td>
<td>1.797</td>
<td>4.2308</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>3.25</td>
<td>1.984</td>
<td>3.0769</td>
</tr>
<tr>
<td><strong>Team</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>1.6875</td>
<td>1.1955</td>
<td>1.5385</td>
</tr>
<tr>
<td>#10</td>
<td>1.8125</td>
<td>0.6551</td>
<td>2.1538</td>
</tr>
<tr>
<td>*</td>
<td>4.875</td>
<td>1.2583</td>
<td>5</td>
</tr>
<tr>
<td>#19</td>
<td>2.0625</td>
<td>0.6801</td>
<td>1.7692</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>3.1563</td>
<td>1.7295</td>
<td>3.0962</td>
</tr>
<tr>
<td><strong>Management and Conflict Resolution</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#11</td>
<td>1.9375</td>
<td>0.5737</td>
<td>1.9231</td>
</tr>
<tr>
<td>#12</td>
<td>3.375</td>
<td>1.6279</td>
<td>3.3077</td>
</tr>
<tr>
<td>#13</td>
<td>2</td>
<td>0.8165</td>
<td>2.4615</td>
</tr>
<tr>
<td>#15</td>
<td>1.9375</td>
<td>1.0626</td>
<td>1.6923</td>
</tr>
<tr>
<td>*</td>
<td>2.3125</td>
<td>1.1955</td>
<td>2.6154</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>2.3125</td>
<td>1.2179</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Transformational Leadership</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#20</td>
<td>2.9375</td>
<td>1.1815</td>
<td>2.6923</td>
</tr>
<tr>
<td>#21</td>
<td>2.75</td>
<td>0.9309</td>
<td>2.7692</td>
</tr>
<tr>
<td>*</td>
<td>3.5</td>
<td>1.7889</td>
<td>4.0769</td>
</tr>
<tr>
<td>*</td>
<td>4.375</td>
<td>1.9621</td>
<td>3.7692</td>
</tr>
<tr>
<td>#25</td>
<td>3</td>
<td>1.3663</td>
<td>2.8462</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>3.3125</td>
<td>1.5719</td>
<td>3.2308</td>
</tr>
<tr>
<td><strong>Assertive Leadership</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#29</td>
<td>Desig/Tech</td>
<td>2.3125</td>
<td>1.3525</td>
</tr>
<tr>
<td>#29</td>
<td>Design Only</td>
<td>2.5714</td>
<td>1.5119</td>
</tr>
<tr>
<td>#29</td>
<td>Tech Only</td>
<td>2.1111</td>
<td>1.2693</td>
</tr>
<tr>
<td><strong>Phronesis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#32</td>
<td>Desig/Tech</td>
<td>3.0625</td>
<td>1.3401</td>
</tr>
<tr>
<td>#32</td>
<td>Design Only</td>
<td>3</td>
<td>0.5345</td>
</tr>
<tr>
<td>#32</td>
<td>Tech Only</td>
<td>3.1111</td>
<td>1.3642</td>
</tr>
</tbody>
</table>

*To keep consistency in data recording, the values assigned in this item were reversed to keep the Likert Scale consistent with the favourable outcome being number one.