

# Modeling of Clinical Supervision Practices of Elementary School Heads in Region XI: A Multinomial Logistic Regression Analysis

Allen L. Tabas-Guilaran

University of Southeastern Philippines, Obrero Campus, Davao City

**Abstract**— The purpose of this study was to determine the significant predictors of supervisory styles in the conduct of clinical supervision. Descriptive- correlation design was utilized in the study. A total of 50 elementary schools in Region XI were selected as respondents through purposive sampling technique. The statistical treatments utilized in the study were mean and standard deviation, frequency and percentage, Chi- Square Test for Independence, and Multinomial Logistic Regression. The major findings revealed that there was a significant relationship between teachers' type, staff development, small group development, direct individual assistance, technology, co- curricular activities, community linkages and supervisory style of elementary school heads. Further, experience, staff development, small group development, and direct individual assistance significantly predicted supervisory style of elementary school heads.

**Keywords**— teacher self-efficacy, job performance, clinical supervision, regression analysis, Philippines.

## I. INTRODUCTION

The single greatest determinant of learning is not socio-economic factor or funding levels, it is instruction, Schmoker (2006). School heads as instructional leaders supervising how teachers deliver instruction is an area to consider. The how's and the why's in supervision give an important consideration. It is a fact that there is no standard scheme on how to monitor and supervise teachers while having classes to improve teaching and learning. The supervision varies and the means to monitor classroom instructions differs.

One of the popular ways of supervising teachers in the classroom is the means through clinical supervision. In more than half a century this type of supervision became the alternative to traditional supervision in various schools. This instructional supervision clearly defines the role of the supervisor within the school system. Thus, clinical supervision has been described by Fred Wilhelms as a system of supervision "with enough weight to have impact and with the precision to hit the target". Like Harris (1975) defines supervision of instruction as: "what school personnel do with adult and things to maintain or change the school operation in ways that directly influence the teaching processes employed to promote learning". The principle underlying this definition is that instructional supervision is both a concept and a process to improve the instruction given to the pupils. Having such principle, the conduct to study on clinical supervision will contribute to the body of knowledge to produce models on how school heads supervise using the different supervisory styles to cope with the several

types of teachers. This will also test how school heads supervise teachers' self-efficacy and job performance that contribute to a good learning environment.

The quest will investigate the practices of the school heads on how they implemented and conducted clinical supervision in their schools. As instructional leaders, they are expected to become effective, and they must be intensely involved in curricular and instructional issues that directly affect student achievement (Cotton, 2003).

Today's principals are motivated to become more active instructional leaders due to the standards and accountability movement, and they must have strong instructional skills and knowledge of teaching and learning (Goodwin, Cunningham & Childress, 2003, Lyons & Algozzine, 2006). The educational system of the Philippines, like any other country in the world sets standard on how the school heads response to various leadership accountabilities. Republic Act 9155 defines the roles and functions of the school heads, which include instructional leadership. A school head is responsible for instructional supervision as the law mandates.

## II. REVIEW OF RELATED LITERATURE

### *Teachers' Attribute*

In the context of the study, this comprises of age, sex, educational background, teachers' position, and teachers' type.

Age. Age is considered as one of the factors that affect the performance of school heads management. The findings revealed that growing old gives wisdom,

profound knowledge and deeper understanding of people, events, and other happenings around them (Bulusan 2002 as cited by Montero, 2010). Age matters in management and that older manager tends to perform better than younger managers because the older manager had acquired skills and experience through the years of their long government or non-government service (Whitesitt as cited by Piguerra, 2005). Hence, Piguerra (2005) recommended in his study that age must be considered in designating people for administrative positions in public elementary schools. His study showed that age was related to the management capabilities of public elementary school administrators. As the school administrator gets older, he tends to become more capable in doing school management roles.

Sex. It is again a common observation that male and female differ in their behavior in many ways. The studies also say that there are certain differences in the functioning of the male and female employees (Winter et al., 2001). Sex plays a vital role in different job performances whether in offices or in field works. Various research provided results how males and females vary in terms of their job performances. Women were found to score higher than men on the interpersonal dimension (Stone et al., 2009). However, no differences in EQ-i scales were found between individuals working in an elementary school versus a secondary school; the same was true when EQ-i scales were compared for principals and vice-principals. People were also compared on each of the leadership ratings (task-oriented leadership, relationship-oriented leadership, and total leadership). Men and women did not differ on any of the leadership ratings (regardless of whether supervisor or staff ratings were used).

Educational Qualification. There is a double challenge of increasing both the number and the quality of teachers. States are creating more rigorous licensure standards and at the same time seek to hire more teachers. The need to find and to keep good teachers is especially critical if states and local districts are to meet rigorous education goals aimed at raising student achievement levels. Recent studies in Tennessee, Boston, and Texas confirm that students taught by the most qualified and effective teachers achieve higher levels (Hirsch, 2000). Correlations among teachers' qualifications and student achievement varied across subjects. Teachers with master's degrees contributed marginally more to increase mathematics scores than teachers with only bachelor's degrees. In middle school,

gains in reading were correlated with teachers holding Ph. D.s in any subject (for English teachers). Students' scores in middle school and high school were negatively impacted by having a teacher who holds only an emergency credential. In middle and high school mathematics, a teacher's mathematics authorization (a proxy for subject-area knowledge) was the best teacher level predictor of student achievement (Betts et al., as cited by Goe, 2007).

Teachers' Position. When the teacher is given the chance to serve in the Department of Education, her/his government service starts and is given a Teacher I position. After 5 consecutive years in service, he/she can file for promotion and be given Teacher II position. Such an employee is given another promotion again depending on his/her achievement during his/ her service (Sabado, 2014).

Clinical Supervision. Clinical supervision models are vehicles for improvements in instructional practices, and they are considered part of instructional supervision (Zepeda, 2007a). Clinical supervision came into the supervisory landscape when Goldhammer and Cogan published their works on clinical supervision in 1969 and 1973, respectively. The models have since been altered to suit different purposes, but all include some of the same basic elements of original clinical supervision.

**Central Principles of Clinical Supervision identified by NCBI (n.d.), these are depicted below:**

1. Clinical supervision is an essential part of all clinical programs. Clinical supervision is a central organizing activity that integrates the program mission, goals, and treatment philosophy with clinical theory and evidence-based practices (EBPs). The primary reasons for clinical supervision are to ensure (1) quality client care, and (2) clinical staff continue professional development in a systematic and planned manner. In substance abuse treatment, clinical supervision is the primary means of determining the quality of care provided.
2. Clinical supervision enhances staff retention and morale. Staff turnover and workforce development are major concerns in the substance abuse treatment field. Clinical supervision is a primary means of improving workforce retention and job satisfaction (Roche, Todd, & O'Connor, 2007).
3. Every clinician, regardless of level of skill and experience, needs and has a right to clinical supervision. In addition, supervisors need and have a right to supervise their supervision. Supervision

needs to be tailored to the knowledge base, skills, experience, and assignment of each counselor. All staff need supervision, but the frequency and intensity of the oversight and training will depend on the role, skill level, and competence of the individual. The benefits that come with years of experience are enhanced by quality clinical supervision.

4. Clinical supervision needs the full support of agency administrators. Just as treatment programs want clients to be in an atmosphere of growth and openness to innovative ideas, counselors should be in an environment where learning and professional development and opportunities are valued and provided for all staff.
5. The supervisory relationship is the crucible in which ethical practice is developed and reinforced. The supervisor needs to model sound ethical and legal practice in the supervisory relationship. This is where issues of ethical practice arise and can be addressed. This is where ethical practice is translated from a concept to a set of behaviors. Through supervision, clinicians can develop a process of ethical decision making and use this process as they encounter new situations.
6. Clinical supervision is a skill in and of itself that must be developed. Good counselors tend to be promoted into supervisory positions with the assumption that they have the requisite skills to provide professional clinical supervision. However, clinical supervisors need a different role orientation toward both program and client goals and a knowledge base to complement a new set of skills. Programs need to increase their capacity to develop good supervisors.
7. Clinical supervision in substance abuse treatment most often requires balancing administrative and clinical supervision tasks. Sometimes these roles are complementary and sometimes they conflict. Often the supervisor feels caught between the two roles. Administrators need to support the integration and differentiation of the roles to promote the efficacy of the clinical supervisor.
8. Culture and other contextual variables influence the supervision process; supervisors need to continually strive for cultural competence. Supervisors require cultural competence at several levels. Cultural competence involves the counselor's response to clients, the supervisor's response to counselors, and the program's response to the cultural needs of the diverse community it

serves. Since supervisors are in a position to serve as catalysts for change, they need to develop proficiency in addressing the needs of diverse clients and personnel.

9. Successful implementation of EBPs requires ongoing supervision. Supervisors have a role in determining which specific EBPs are relevant for an organization's clients (Lindbloom, Ten Eyck, & Gallon, 2005). Supervisors ensure that EBPs are successfully integrated into ongoing programmatic activities by training, encouraging, and monitoring counselors. Excellence in clinical supervision should provide greater adherence to the EBP model. Because State funding agencies now often require substance abuse treatment organizations to provide EBPs, supervision becomes even more important.
10. Supervisors have the responsibility to be gatekeepers for the profession. Supervisors are responsible for maintaining professional standards, recognizing, and addressing impairment, and safeguarding the welfare of clients. More than anyone else in an agency, supervisors can observe counselor behavior and respond promptly to potential problems, including counseling some individuals out of the field because they are ill-suited to the profession. This "gatekeeping" function is especially important for supervisors who act as field evaluators for practicum students prior to their entering the profession. Finally, supervisors also fulfill a gatekeeper role in performance evaluation and in providing formal recommendations to training institutions and credentialing bodies.
11. Clinical supervision should involve direct observation methods. Direct observation should be the standard in the field because it is one of the most effective ways of building skills, monitoring counselor performance, and ensuring quality care. Supervisors require training in methods of direct observation, and administrators need to provide resources for implementing direct observation. Although small substance abuse agencies might not have the resources for one-way mirrors or videotaping equipment, other direct observation methods can be employed (see the section on methods of observation).

### *Self-Efficacy*

Self-efficacy is defined as the individual's belief and faith in their capabilities to do the responsibility and adapt with surrounding environment, (Sohrabi et al., 2016). Such individuals perform more efficiently in



stressful environments, apply a more effective strategy to deal with the challenges, and have more job satisfaction (Nielsen & Daniels, 2012). Self-efficacy is improved by an increase in knowledge and skills (Cohen & Cragin, 2010), and it gives individuals the ability to organize the activities and leads to motivation formation and more ability in dealing with the things (Lauder et al., 2008). Unsuccessful accomplishment of the jobs results from self-inefficacy in efficient other issues. Individuals' judgments about their own function are originated from their self-efficacy (Modern Educational Psychology, 2013). Bandura (1997) as cited by Chemers, Hu, and Garcia (2001) described self-efficacy as "the belief in one's capabilities to organize and execute courses of action required to produce given attainments". Efficacy beliefs influence the courses of action a person chooses to pursue, the amount of effort that will be expended, perseverance in the face of challenges and failures, resilience, and the ability to cope with the demands associated with the chosen course. Self-efficacy has been related to persistence, tenacity, and achievement in educational settings (Bandura, 2001).

**Staff Development.** Promoting the development of teachers' competence in teaching transversal competences—and heterogeneous classes, and collaborating with colleagues and parents, are seen as essential.

According to OECD (2005), the forms of support to teachers' professional development can consist in paid working time and substitutions (often discouraged for budget and organizational reasons), funding of CPD costs sustained by teachers, salary incentives, CPD as condition for salary progression and promotion, national policies, and campaigns (such as the recent one in Sweden). Recent studies concerning the status of professional learning in the US have also explored the ways in which policy can affect professional learning, taking four high-performing states (Vermont, Missouri, New Jersey and Colorado) as examples, selected on the basis of high levels of teacher participation in CPD, research-consistent policies, and student achievement improvements, but characterized by geographic, demographic and policy context diversity (Jaquith, Mindich & Chung Wei, 2010).

**Technology.** Many researchers agree that technology can be used effectively as a cognitive tool as well as an instructional media. Bruce and Levin (2001) suggest that technology can be helpful in classroom by

encouraging inquiry, helping communication, constructing teaching products, and assisting students' self-expression. According to Snelbecker (1999), it is impossible not to pay attention to the significant impact of technology when discussing instruction, education, or training issues. The use of computers in education opens a new area of knowledge and offers a tool that has the potential to change some of the existing educational methods. The teacher is the key to the effective exploitation of this resource in the educational system. As computer use continues to increase in society, teachers must also prepare for the use of computers within the classroom (McCannon & Crews, 2000).

Bhatta (2008) considers that effective teacher preparation in ICT-based education requires adequate training in three areas:

- Information technology literacy
- Child-centric interactive teaching
- Integration of ICT-based instruction in child-centric interactive teaching.

**Job Performance.** Job performance is the way and way a staff in an organization performs the duties assigned to him or expected of him to realize the organization's goals and objectives (Duze, 2012). In the school system, a teacher's job performance could be described as the duties performed by a teacher at any given time in the school geared towards achieving both the daily school and classroom objectives and the entire set goals and objectives of education. It could be determined by the employee's behavior under different situations and/or by his level of participation in the day-to-day running of the organization for goal accomplishment. Therefore, job performance of a worker could be described as low, moderate, high, etc, depending on the extent of his commitment to work to achieve set objectives and goals (Adeyemi, 2004).

**Co- Curricular Activities.** Co-curricular activities were to be an integral part of school life. The activities sponsored or recognized by a school were not a part of the academic curriculum but were acknowledged to be an essential part of life of an educational institution which include sports, school bands, students' newspapers, etc. Co-curricular activities were good for teacher-student relations and in the presence of these activities' students performed better in studies.

Teachers get more time to understand their students. They get to know different sides of their students other than studies. Teachers get advantages from them as they

could help others with their ideas and presence (Ahmad, 2006).

**Community Linkage.** School-community links are based on a combination of pedagogic, economic, and socioeconomic dimensions. Many good schools have a strong link to the communities they serve, influenced by one or more of these factors (UNICEF, 2009).

**Supervisory Styles of School Heads.** In *The Managerial Grid*, co-authors Robert Rogers Blake and Jane Srygley Mouton as cited by AASA (2016), professors of management at the University of Western Ontario, define supervisory styles in terms of being collaborative, cooperative, participative, bureaucratic, laissez-faire, benevolent despotic and autocratic. They support collaborative, cooperative, and participative leaders and disparage bureaucrats, benevolent despots, autocrats and laissez-faire types. However, despite the negative perceptions associated with these latter supervisory styles, we both have known staffs that adored and worked hard for their benevolently despotic superintendents or principals and teachers who were productive only with autocratic principals. And we know of staff members who rose to the occasion with laissez-faire leaders.

**Collaborative Leadership.** A collaborative leadership style suggests that the supervisor involves the staff in setting the direction of the school. None of the successful leaders in the studies by Dunn and DeBello or Dunn and Griggs solicited teachers' perceptions of the instructional direction that should be taken. Rather, most of them determined the best direction for their school and then persuaded their staff to adopt approaches to move in that direction.

**Participative Leadership.** Participative leaders work with their staff members to guide the school and its programs. Roland Andrews, principal of Brightwood Elementary School in Greensboro, N.C., exemplifies participative leadership. He first learns everything he can about a concept or program, decides whether it will benefit the students and then personally conducts staff development sessions around its philosophy and implementation. Andrews collaborates with teachers, parents, and students to create resources, experiment with classroom implementation, and share suggestions for continuing improvement throughout the process.

Ibrahim and Shakya, (2013), in their study examined the relationship between principals' leadership style and job performance of teachers in secondary schools in Dubai

concluding that the school principals in secondary schools use participative leadership style more while using less autocratic leadership style as a result boost favorable performance of the teachers.

Another finding was that participative leadership style is in positive association with the success of the athletic. Kumar (2012), in a study titled "Principals' Leadership Style and their Performance and Effectiveness in Schools of Dubai" achieved the result that leadership style of principals has a direct relationship with their efficiency and effectiveness influencing their effectiveness, although the leadership style of principals are different in terms of school level and sex.

**Bureaucratic Leadership.** Bureaucrats prioritize according to established rules and regulations, some of which can inhibit innovation. Because ensuring that all students achieve may require at least some departure from established practices, bureaucratic leaders may not enable more than gradual movement toward new, effective instructional strategies.

**Charismatic Leadership.** Charismatic individuals can exercise almost any leadership style and garner sufficient staff support to move the organization in the chosen direction. However, our interviews suggested that the innovations that charismatic leaders introduced rarely continued after that person left the school or changed jobs.

**Laissez-faire.** Laissez-faire leaders allow staff members to determine the direction they wish to move individually or as a group. While few leaders embrace or endorse this style, it can elicit positive results. Adeyemi (2011) in research entitled: "Leadership Styles of Principals and Vocative Performance of Teachers in Secondary Schools in Ondo Province in Nigeria" reports democratic leadership style as the most common leadership style at schools in Nigeria, and the next style used by principals after the abovementioned style was laissez-faire leadership style.

**Directive Style.** Directive leadership style is like the task-oriented style. The leader who uses this type of leadership style provides teachers with specific guidelines, rules and regulations with regard to planning, organizing and performing activities. This style is deemed to be appropriate when the subordinates' ability is low and or the task to be performed is complex or ambiguous. Job satisfaction is increased when the leader gives more directives (Hoy & Miskel, 2001 as cited by Jay, 2014).

### III. METHOD AND MATERIALS

#### 3.1 Research Design

This research is quantitative in nature. Specifically, this study utilized descriptive-correlation design which investigated the relationship between independent and dependent variables. Also, it measures the degree of association between two or more variables or sets of scores (Creswell, 2012). Similarly, it investigates correlation between variables to developmental studies which seek to determine changes over time. This is apt to the present study since it seeks to establish relationship between and among teachers' attributes, teacher's types, teachers' self- efficiency, job performance, and supervisory styles of elementary school heads.

Correspondingly, the descriptive design described the profile of the elementary teachers surveyed in terms of age, sex, highest educational qualification, position, and teacher types. Also, it highlighted the levels of teachers' attributes, teacher's types, teachers' self- efficiency, job performance, supervisory styles of elementary school heads in Region XI.

#### 3.2. Participants

This study was participated in by 50 elementary schools across the ten schools division of Department of Education (DepEd ) Region XI which were described by the following: (1) category as central school, non-central for big, medium, and small schools; (2) geographical location whether it's an urban or rural; (3) accreditation as Accredited Public Elementary School (APES) level I, II, or III; and (4) achievement rate average Mean Percentage Score (MPS) in National Achievement Test (NAT-VI) for the past three consecutive school years.

### IV. RESULTS AND DISCUSSION

#### *Profile of Elementary Teachers Based on sex, age, education, position, and Experience.*

Teachers' Sex Profile shows distribution in percentage of the 1,500 respondents in 50 elementary schools covering the ten schools' divisions of region XI. It shows that there are 143 male teachers responded, while 1,152 female respondents, having a total of 1,295. There were 186 who did not affix their sex category, and the total respondents covered 1,481. The age of the respondents when grouped according to the following age bracket: 30 and below are 372 which is 25.1%; 31 to 45 are 663 which is 44.8%; 46 to 55 are 328 which is 22.1%; and 56 and above are 103 which is 7%. There is a missing entry which is 15, and this 1% of the total

number of respondents. The educational qualification of the teachers' profile there are 428 teachers who are college graduates or have not earned a unit in post graduate studies, which is 28.90%. The following frequency of teachers' education having earned and acquired post graduate units include the following: Acquired Certification of Academic Requirements in master's degree (CAR\_MA) with 210 teachers or 14.2%; finished Masters' Degree with 378 or 25.5%; Acquired Academic Requirements in Doctoral Degree (CAR\_EDD) with 5 teachers or 3%; and Doctoral Degree Holders with 5 teachers or 3%. Moreover, it can be noticed that 455 or 30.70% of respondents did not reveal their educational qualification. the distribution of teacher- respondents according to teacher type. From the generated results, it registers a total N= 1464 or 98.90 percent where in the remaining 1.10 percent or 17 cases are considered missing. Meanwhile, unfocused, and analytical teachers rank with the highest percentage of 50.80 or 752 teachers followed by dropout with 703 or 47.50 percent, and professional recorded the lowest with 9 or .60%.

Level of Clinical Supervision as Perceived by Elementary Teachers. This section highlights teachers' perception on the practice of clinical supervision.

Perceived Practice on Clinical Supervision. Presents the frequencies perceived by the elementary teachers on their level of practice in clinical supervision in the following phases, namely: Pre-Observation Conference; Observation; Analysis and Interpretation of Data; and Post-Observation conference. The table shows the thirty-seven (37) indicators asked to the surveyed teachers about the rating scale given. The three scales are interpreted using guides like: 1 – 1.50 for Too Little; 1.51-2.50 for Just right; and 2.51-3.0 for Too Much. The average mean in each indicator assessed is just right, which means this play within the range of 1.51- 2.50.

The mean ratings of pre- observation, observation, analysis and interpretation of data, and post observation conference are described as just right. Moreover, the overall average result in the phases of clinical supervision marks a mean rating of 2.44 which can be described as just right. Meanwhile, it tallies a total number of respondents of 1269 with an SD= .59.

Level of Teachers' Self- Efficacy. This is measured in terms of staff development, small group development, direct individual assistance, and technology. Results revealed an overall N= 1481 with M=2.36, SD=.59. This



means that teachers sometimes or moderately exercise self- efficacy.

Teachers' Job Performance. Two indicators measure teachers' job performance, namely, co- curricular and community linkage. From the generated result, it yields an overall  $M=2.49$  with  $SD=.62$ . A total of 1481 is presented in the table. Further, community linkage marks a  $M=2.50$  with  $SD=.62$  while co- curricular tallies  $M=2.49$  with  $SD=.62$ . This implies that teachers sometimes or moderately exercise co- curricular and community linkage as part of their job performance.

Supervisory Style of Elementary School Heads. Based on the result, it can be gleaned that collaborative supervisory style rank the highest with 50.80 percent followed by directive with 47.50 percent, and non-directive recorded the lowest with .60%. From these percentages, it covers 98.90 percent with  $N=1464$ . Meanwhile, seventeen cases are identified as missing. This makes up 1.10 percent.

Relationship among Teachers' Attribute, Teachers' Type, Self- Efficacy, Job Performance, and Supervisory Style of Elementary School Heads. This exemplifies the relationship between the independent and dependent variable. The independent variables are teachers' attribute, teacher type, self- efficacy, and job performance. On the other hand, the dependent variable is the supervisory style measured as non- directive, collaborative, and directive. Based on the result, only teacher type displayed a significant relationship on supervisory style of elementary school heads where it tallies a Pearson Chi- Square of 2928 having 4 degrees of freedom with p- value of .000 which is lesser than .05 in the level of significance which indicates significant, thus, the null hypothesis is rejected. Hence, as teacher type increases, the supervisory style of elementary school heads also increases. Meanwhile, age, sex, educational background, and teachers' position are not significant correlated to supervisory style where it marks p- values of .102 for sex and .952 for position which are greater than .05 in the level of significance, thus, it fails to reject the null hypothesis. The correlation between teachers' self- efficacy and supervisory style of elementary school heads, from the generated result, it reveals that the indicators of self- efficacy namely staff development, small group development, direct individual assistance and technology are significantly correlated to supervisory style of elementary school heads. Individually, staff development garners a Pearson Chi- Square of 693.08, with 4 degrees of freedom, 1464

total respondents with p- value of .000 which is lesser than .05 in the level of significance which indicates significant. Hence, the null hypothesis is rejected. Further, small group development, direct individual assistance, and technology yields a Pearson chi- square values of 802.78, 869.89 and 860 .93 with 4 degrees of freedom, 1464 total respondents with p- values of .000 which are lesser than .05 in the level of significance, thus, rejecting the null hypothesis. Moreover, the result suggests that as teachers' self- efficacy increases, the supervisory style of elementary school heads increases. Also, teachers' self- efficacy is dependent on supervisory style of elementary school heads (vice versa). The correlation between teachers' job performance and supervisory style of elementary school head. The results revealed that co- curricular and community linkages are significantly correlated to supervisory style of elementary school head. This implies that as teachers' job performance increases, the supervisory style of elementary school head increases. Meanwhile, co – curricular activities registered a Pearson Chi- Square of 934.34 having a of 4, with total respondents of 1464 and p- value of .000 which is lesser than .05 in the level of significance, thus, the null hypothesis is rejected. Also, community linkages obtain a Pearson Chi- Square value of 922.95 with p- value of .000 which is lesser than .05 in the level of significance, thus, the null hypothesis is rejected.

Significant Influence of Teachers' Attribute, Teachers' Type, Self-Efficacy, and Job Performance on Supervisory Style of Elementary School Head. One of the outputs of regression is the Likelihood Ratio Tests which indicate the contribution of the variable to the overall relationship between the dependent variable and the individual independent variables. Also, this is used in determining the significant predictor of supervisory style of elementary school head. Based on the result, there are four variables that significantly predict supervisory style of elementary school heads. These are experience, staff development, small group development, and direct individual assistance. Experience tallies Chi- Square value of 16.435 having 2 degrees of freedom with p- value of .000; staff development marks a Chi- Square value of 67.307, 2 degrees of freedom with p- value of .000, small group development with 2 degrees of freedom, Chi- Square value of 124.093, and direct individual assistance with Chi- Square value of 9.825 with 2 degrees of freedom and p- value of .000. The p- values obtained are lesser than .05 in the level of significance, hence, the null hypothesis is rejected. Meanwhile, the other variables

mentioned are not good predictors of supervisory style of elementary school head. From the equation above, these points out that higher score in staff development decreases the likelihood that the supervisory style is collaborative instead of directive. Hence, one unit increase in staff development score is associated by an 83% (.169 - 1) decrease in the odds of using collaborative supervisory style. Also, the higher the score in small group development, decreases the likelihood that the supervisory style is collaborative instead of directive. Thus, one unit increase in small group development, decreases the odds by (.029-1) by 97 percent that the supervisory style is collaborative. In addition, the higher the score in direct individual assistance decreases the chance of using collaborative style instead of directive style. Hence, one unit increase in direct individual assistance, decreases the probability by 64.4 percent (.356-1) of using collaborative style.

Moreover, the higher the score in community linkage, decreases the chance of using collaborative style instead of directive. A one unit increase in community linkage is associated by (.457-1) 54.3 percent decrease of using collaborative style. Similarly, a teacher 1 decreases the chance of being supervised collaboratively by 72 percent (.28000000- 1), teacher 2 by 63 percent (.36900000-1), and teacher 3 by 55 percent (.45130000 - 1).

## V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### Summary

The relevant findings of the study were presented in this section. It gives answer to the problem statements mentioned in the previous section. The findings were presented below:

On the profile of elementary teachers, out of 1481 respondents, 77.80 percent are females and 9.70 percent are males. In terms of age, 30 years and below registered 25.1 percent, 31 to 45 years tallied 44.80 percent, 45 to 55 years recorded 22.1 percent, and 56 and above marked 7 percent. Meanwhile, on the educational qualification, 28.9 percent were college graduate, Masteral- CAR holder registered 14.2 percent, master's degree recorded 25.5 percent, and Doctorate- CAR marked .30 percent. In terms of teachers' position, 42.1 percent were teacher 1, 24.4 percent were teacher 2, 14.3 percent were teacher 3, 4 percent were master teacher 1, and .2 percent were master teacher 2. In terms of teachers' type, unfocused and analytical marked with

50.80 percent followed by dropout with 47.50 percent, then, professional indicated .60 percent.

The perception of the elementary teachers in their level of practice in clinical supervision in terms of pre-observation conference; observation; analysis and interpretation of data; and post observation conference were described as just right. This implies that teachers were satisfied and contented on clinical supervision.

The level of teachers' self - efficacy in terms of staff development, small group development, direct individual assistance, and technology were described as average. This means that teachers' self- efficacy was sometimes manifested in the workplace.

The level of teachers' job performance was described as average. This implies that teachers' job performance in terms of co- curricular activities and community linkages were sometimes manifested by teachers.

The distribution of supervisory styles of elementary school heads indicated 50.80 percent for collaborative, 47.50 percent for directive, and .60 percent for non-directive. This implies that there is a higher number of collaborative styles exercised by elementary school heads than non- directive and directive style.

The correlation between teachers' type, perceived clinical supervision, teachers' self- efficacy, teachers' job performance, and supervisory style, results revealed that teacher type was significantly correlated to supervisory style. Meanwhile, staff development, small group development, direct individual assistance and technology were significantly related to supervisory style. In addition, teachers' job performance in terms of co- curricular activities and community linkages displayed significant correlation to supervisory style. Therefore, the results indicated that as teachers' type, staff development, small group development, direct individual assistance, technology, co- curricular activities, and community linkages increases, the supervisory style of elementary school heads also increases. Similarly, supervisory style of elementary school heads was dependent on the teachers' type, staff development, small group development, direct individual assistance, technology, co- curricular activities and community linkages. Indicated variables marked p - values which were lesser than .05 in the level of significance, thus, the null hypothesis was rejected.

In predicting supervisory style of elementary school heads, four variables were identified as significant



predictors. These variables were experience, staff development, small group development, and direct individual assistance. These predictors registered p-values which are lesser than .05 in the level of significance, thus, the null hypothesis was rejected.

### Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. The profile of elementary teachers registered higher percentage of female, college graduate, 31 to 45 years old, teacher 1 and unfocused and analytical teacher type.
2. The perception of the elementary teachers in their level of practice in clinical supervision in terms of pre-observation conference; observation; analysis and interpretation of data; and post observation conference were described as just right.
3. The level of teachers' self – efficacy in terms of staff development, small group development, direct individual assistance, and technology were described as average.
4. The level of teachers' job performance was described as average.
5. The distribution of supervisory styles of elementary school heads registered highest percentage of collaborative followed by directive and the least was non- directive.
6. There was a significant relationship between teachers' type, staff development, small group development, direct individual assistance, technology, co- curricular activities, community linkages and supervisory style of elementary school heads.
7. Experience, staff development, small group development, and direct individual assistance significantly predicted supervisory style of elementary school heads.

### Recommendations

From the conclusions drawn, the following were suggested:

1. Strengthen the self- efficacy of teachers by sending them to skills enhancement activities and professional development scheme.
2. Maintain the level of clinical supervision conducted by school heads.
3. Increase or enhance the level of teachers' job performance by exposing them to more co- curricular activities and community linkages.

4. Sustain the collaborative supervisory style implemented by elementary school heads.
5. Intensify staff development, small group development, direct individual assistance to positively improved supervisory style of school heads.
6. Explore other variables that may influence supervisory style of school heads.
7. Conduct similar study to certain division to validate its findings.

### REFERENCES

- [1] AASA (2016). Supervisory styles of instructional leaders. Retrieved from <http://www.aasa.org/SchoolAdministratorArticle.aspx?id=7886> on March 3, 2016.
- [2] Adeyemi, T. O. (2004). Educational Administration: An Introduction. Lagos: Atlantic Associated Publishers.
- [3] Adeyemi, T. O. (2011). Principals' Leadership Styles and Teachers' Job Performance in Senior Secondary Schools in Ondo State, Nigeria, Current Research Journal of Economic Theory, 3(3): 84-92.
- [4] Ahmad, M. (2006). Ilmi comprehensive dictionary of education (1st ed.). Lahore: Ilmi kitab khana.
- [5] Akerele, S. A. (2007). Principals leadership styles and teachers' job performance in Lagos State Public Secondary Schools. Unpublished M.Ed Thesis, University of Ado-Ekiti, Nigeria, pp: 110-124.
- [6] Albion, P. R. (2001). Some factors in the development of self-efficacy beliefs for computer use among teacher education students. Journal of Technology and Teacher Education, 9(3), 321-347.
- [7] Artino, A. (2012). Academic self- efficacy: From educational theory to instructional practice. Perspect Med Educ, 1 (2), 76-85.
- [8] Babcock. L. (2008). What happens when women don't ask? Negotiation, 11 (96), 1-4.
- [9] Bandura, A. (2001). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), Self-efficacy in changing societies (pp. 1-45). New York: Cambridge University Press.
- [10] Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory: Englewood Cliffs, NJ: Prentice-Hall.
- [11] Bandura, A. (1991a). Self-efficacy mechanism in physiological activation and health-promoting

- behavior. In J. Madden, IV (Ed.) *Neurobiology of learning, emotion and affect* (pp.229) New York: Raven.
- [12] Bandura, A. (1991b), Self-regulation of motivation through anticipatory and self-regulatory mechanisms. In R.A. Dienstbier (Ed.) *Perspective on motivation: Nebraska symposium motivation* (Vol. 38, pp.69-164). Lincoln: University of Nebraska Press.
- [13] Burden, P.R. "Teachers Perceptions of the Characteristics and Influences on These Personal and Professional Development." Ph.D. dissertation, Ohio State University, 1979.
- [14] Brophy, J.E. "Teacher Behavior and Student Learning." *Educational Leadership* 3 (October 1979): 33-38.
- [15] Bruner, J.S. "The Process of Education. Cambridge, Mass.: Harvard University Press, 1960.
- [16] Bovard, Bruce Erskine. "An Analysis of Role Perception and Practice Differences and Similarities among Selected Supervisory Subject Fields." Ph.D University of Maryland. 1988. 196 pp. (49/07-A:1629).
- [17] Buckner, Larmon McCampbell. "Supervising with Communicative Competence in Early Childhood Centers. Sociopolitical implications of the Legitimation Deficit in Administrator Preparation. Ed.D University of San Francisco, 1988. 153 pp. (49/08-A 2034).
- [18] Barrientos, M. A. (2008). *The Public Elementary School Administrators' Managerial Practices and Teacher's Job Performance in Cotabato Province*. (Unpublished Dissertation, USM, Kabacan, Cotabato).
- [19] Beckman, D., & Menkhoff, L. (2008). Will women be women? Analyzing the gender difference among financial experts, *Kyklos*, Vol. 61, No. 3, 364–384.
- [20] Belal, A., Kaifi, B., & Mujtaba, G. (2010). Transformational Leadership of Afghans and Americans: A Study of Culture, Age and Gender, *Journal of Service Science & Management*, DOAJ, DOI: doi:10.4236/jssm.2010.31019.
- [21] Bhatta, S. D. (2008). *Tackling the Problems of Quality and Disparity in Nepal's School Education: The OLPC Model*. Katmandu: OLE.
- [22] Bordbar, F. (2010). English teachers' attitudes toward computer-assisted language learning. *International Journal of Language Studies*, 4(3), 27-54.
- [23] Bruce, B., & Levin, J. (2001). Roles for new technologies in language arts: inquiry, communication, construction, and expression. In J. Jenson, J. Flood, D. Lapp, & J. Squire (Eds.), *The handbook for research on teaching the language arts*. NY: Macmillan.
- [24] Butler, D., & Leahy, M. (2003). *The TeachNet Ireland project as a Model for Professional Development for Teachers*. Dublin: St. Patrick's College of Education, Dublin City University
- [25] Butuan, N. N. (1997). *Determinants of Job Satisfaction among Faculty Members in College of Cotabato Province*. (Unpublished Dissertation, USM, Kabacan, Cotabato).
- [26] Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93, 5564. doi:10.1037//0022-0663.93.1.55.
- [27] Cohen, S., & Cragin, L. (2010). Self-Efficacy Change With Low-Tech, High-Fidelity Obstetric Simulation Training for Midwives and Nurses in Mexico. *Clinical Simulation in Nursing*. <http://202.114.89.42/resource/pdf/5002.pdf>.
- [28] Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, 19(2), 189-211.
- [29] Duze, C. (2012). *Leadership Styles of Principals and Job Performance of Staff in Secondary Schools in Delta State of Nigeria*. *An International Journal of Arts and Humanities*, 1 (2), 224-245.
- [30] European Commission (2007). *Communication from the European Commission to the European Parliament: Improving the Quality of Teacher Education*. Brussels, August 2007.
- [31] Eurydice (2009). *Key data on Education in Europe 2009*. Brussels: Eurydice publications.
- [32] Erb, Ray Jr. "The Nature and Scope of Instructional Supervision Functions of Districtwide Supervisors and Their Relationship to Student Performance on the Pennsylvania Educational Quality Assessment Inventory." Ed.D. Lehigh University, 1988. 201 pp. (49/07-A:1635).
- [33] Evans, Roberta Diane. "An Analysis of the Extent to Which Clinical Supervisor is Used with Student Teachers at Holmes Group Steering Committee Institutions." Ed.D University of Nevada, Rene 1988. 99 pp. (49/08-A:2087).

- [34] Fang, J. T. Y., & Ngee, C. H. (2013). Teachers' attitudes towards co-curricular activities in selected schools, *Journal of Research, Policy & Practice of Teachers & Teacher Education*, Vol. 3, No. 2, 60-70.
- [35] Fooi, F. S., & Ngang, T. K. (2000), Kepimpinan pengajaran pengetua dan kepuasan guru, *Jurnal pengurusan dan kepimpinan pendidikan*, Institut Aminuddin Baki, 10(3), 35-48
- [36] Gagabi, M. S. (1991). Variables Influencing Teaching Performance of Master Teachers of DECS Pilot Central Elementary School, Region XII. (Unpublished Dissertation, USM, Kabacan, Cotabato).
- [37] Geijsel, F., Slegers, P., Stoel, R. & Krüger, M. (2009). The Effect of Teacher Psychological, School Organizational and Leadership Factors on Teachers' Professional Learning in Dutch Schools. *The Elementary School Journal*, 109(4), 406-427.
- [38] Ghafoori, F., Ganjavi, F., & Dehghan, A. (2008). Relationship between leadership style and creative in sport teacher. *Sport Management*, 2,19.
- [39] Gorder, L. M. (2008). A study of teacher perceptions of instructional technology integration in the classroom. *Delta PI Epsilon Journal*, 2, 63-76.
- [40] Glassberg, S. "Development Models of Teacher Development." March 1979, ERIC ED 171 658.
- [41] Good, T.L. "Teacher Effectiveness in the Elementary School." *Journal of Teacher Education* 30 (March–April 1979): 52-64.
- [42] Goldammer, Donna Joan May. "Selection Role, and Function of Supervisors of Student Teaching as Described by Directors of Field Experiences in Colleges and Universities in the Upper Midwest." Ed.D University of South Dakota, 1988. 127 pp. (49/06-A.1383).
- [43] Gordon, B. "Teachers Evaluate Supervisory Behavior in the Individual Conference." *Clearing House* 49 (January 1975): 231-238.
- [44] Granger, C. A., Morbey, M. L., Lotherington, H., Owston, R. D., & Wideman, H. H. (2002). Factors contributing to teachers' successful implementation of IT. *Journal of Computer Assisted Learning*, 8, 480-488.
- [45] Hackman, M. Z., & Johnson, C. E. (2009). *Leadership: A communication perspective*, (5th ed.). Long Grove, IL: Waveland Press.
- [46] Harris, B.M. *Supervisory Behavior in Education* 2nd ed. Englewood Cliffs, N.J. Prentice Hall, Inc. 1975.
- [47] Hart, N.E.C. "The Philosophical Bases of Instructional Supervision, Identification and Classification." Ph.D. dissertation, University of Georgia, 1979.
- [48] Hartman, Rozenna C. "Special Education Supervisors in Pennsylvania Preparation and Role Responsibilities." Ed.D. Temple University, 1988. 175 pp. (49/07-A:1640).
- [49] Holodick, Nicholas Anthony. "Clinical Supervision Practices as Reported by Elementary School Principals." Ed.D. Temple University, 1988. 145 pp. (49/10-A:2874).
- [50] Hook, C.M. and Rosenshine, B. "Accuracy of Teacher Reports of Their Teaching Behavior." *Review of Educational Research* 49 (Winner 1979): 1-12.
- [51] Hoscak-Curlin, Karen. "Using Peer Coaching to Improve the Implementation of a Process Approach to Writing Instruction: A Clinical Supervision Model." Ph.D University of South Florida, 1988. 312 pp. (49/07-A-1770).
- [52] Hoy, A. W. (2000). Changes in teacher efficacy during the early years of teaching. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- [53] Ibrahim, A. S., & Shaikah. T. (2013). Principal leadership style, school performance, and principal effectiveness in Dubai schools. *International Journal of Research Studies in Education*, 2(1), 41-54.
- [54] Jaquith, A., Mindich, D., & Chung Wei, R. (2010). Pockets of Excellence. *JSD*, 31 (5), October 2010. [www.learningforward.org](http://www.learningforward.org).
- [55] Jalilzadeh, M., Abbasi, H., & Mohammadi, S. (2013). The relationship between principals' leadership styles with performance of physical education teachers in secondary schools in western provinces of Iran, *Asian Journal of Management Sciences & Education*, 2 (4), 187-193.
- [56] Jay, A. (2014). The principals' leadership style and teachers performance in secondary schools of Gambella regional state. *Institute of education and professional development studies*, Thesis, 1-97.
- [57] Kohlberg, L. "The Development of Modes of Moral Thinking and Choice in the Years 10 to



- 16.” Ph.D. dissertation, University of Chicago, 1958.
- [58] Kohlberg, L. “Stage and Sequence. The Cognitive Developmental Approach to Socialization. In Handbook of Socialization Theory and Research Edited by D.A. Goslin Chicago: Rand-McNally & Co., 1969.
- [59] Krickovich, Susan Rose. “A Study of Clinical Supervision Based on Hunter’s Model of Instruction and Pupil Performance in Reading and Mathematics” Ed.D State University of New York at Buffalo, 1988. 157 pp. (50-06-A:1632).
- [60] Lantz, P. (2008). Gender and leadership in health care administration: 21st century progress and challenges, *Journal of Healthcare Management*, Vol. 53, No. 5, 291–301.
- [61] Lau & Sim (2008). Exploring the extent of ICT adoption among Secondary school teachers in Malaysia. *International Journal of Computing and ICT Research*, 2(2), 19-36. Retrieved Nov 2, 2011 from <http://www.ijcir.org/volume2/number2/article3.pdf>.
- [62] Lauder, W., Holland, K., Roxburgh, M., Topping, K., Watson, R., Johnson, M.(2008). Measuring competence, self-reported competence and self-efficacy in pre-registration students. *Nursing Standard*, 22(20), 7. <http://discovery.dundee.ac.uk/portal/en/research/>
- [63] Lobian, Stephen James. “An Analysis of the Relationship between Clinical Supervision and Situational Leadership. The Development of a Process to Increase Clinical Supervision Effectiveness.” Ed.D. University of Massachusetts, 1988. 159 pp. (49/10-A:2878).
- [64] Lunsford, Barbara Fricks. “Perceptions of Relationships between Teachers and Supervisors during the Implementation of a New Teacher Evaluation Model” Ed.D University of Georgia, 1988. 169 pp. (49/11-A-3222).
- [65] Lewandowski, K. (2005). A study of the relationship of teachers’ self-efficacy and the impact of leadership and professional development, Dissertation.
- [66] Koh, J. H. L., & Frick, T. W. (2009). Instructor and student classroom interactions during technology skills instruction for facilitating pre-service teachers’ computer self-efficacy. *Journal of Educational Computing Research*, 40(2), 211-228.
- [67] Kotur, B., & Anbazhagan, S. (2014). The Influence of Age and Gender on the Leadership Styles, *IOSR Journal of Business and Management*, Volume 16, Issue 1. Ver. III, 30-36.
- [68] Kumar, S. (2012). Practice and Problems of Principals’ Leadership Style and Teachers’ Job Performance in Secondary Schools of Ethiopia. *International Journal of Research Studies in Education*, 2(1), 41-54.
- [69] Litterell, A. B., Zagumny, M. J., & Zagumny, L. L. (2005) “Contextual and psychological predictors of instructional technology use in rural classrooms,” *Educational Research Quarterly*, 29(2), 37-47.
- [70] McCannon, M., & Crews, B.T. (2000). Assessing the technology training needs of elementary school teachers. *Journal of Technology and Teacher Education*, 8, Issue 2, 111-121.
- [71] Minnear- Peplinski, R. M. (2009). Principals’ and teachers’ perceptions of teacher supervision, Theses and Dissertations.
- [72] Mirani, Z. D., Narejo, M. A., & Kumbhar, M. I. (2003). Essential leadership competencies needed in agricultural occupations as identified by agricultural leaders in district Hyderabad, Sindh. *Pakistan Journal of Applied Sciences*, 3(1), 30-35.
- [73] Mitchell, S., & DellaMattera, J. (2010). Teacher support and student’s self-efficacy beliefs. *Journal of Contemporary Issues in Education*, 5(2), 24-35.
- [74] Montero, R. J. (2010). The influence of school principals’ leadership behavior and school climate on teachers’ and schools’ Performance of the public Elementary schools. (Unpublished Master’s Thesis. USM, Kabacan, Cotabato).
- [75] Mosaddegh Raad, A. M. (2005). Investigating the relationship between leadership styles of the directors and the efficiency of university hospitals in Isfahan. *Journal of Administrative Sciences and Economics*, Isfahan University, year 17 (4), 37-24.
- [76] Nielsen, K., & Daniels, K. (2012). Does shared and differentiated transformational leadership predict followers’ working conditions and well-being?. *The Leadership Quarterly*, 23, 14.<http://dx.doi.org/10.1016/j.leaqua.2011.09.001>.
- [77] Oduro, G. K. T. (2004). Distributed leadership in schools: what English head teachers say about the pull and push factors. An unpublished paper presented at the British Educational Research Association Annual Conference, University of Manchester, 16-18 September 2004.
- [78] OECD (2005). *Teachers matter*. Paris: OECD.

- [79] OECD (2009). Creating Effective Teaching and Learning Environments. First Results from TALIS. Paris: OECD Publications <<http://www.oecd.org/dataoecd/17/51/43023606.pdf>>
- [80] Ojode, L. A., Walumbwa, O., & Kuchinke, P. (1999). Developing human capital for the evolving work environment Transactional and trans-formational leadership within an instructional setting. Paper presented at the meeting of the Midwest Academy of Management, Lincoln, NE.
- [81] Parnell, J. (2010). „Propensity for participative decision making in Latin America: Mexico and Peru“, *The international Journal of Human Resources Management*, 21 (3), 2323-2338.
- [82] Pelgrum, W. J., & Law, N. (2003). ICT in education around the world: trends, problems and prospects. Paris: UNESCO.
- [83] Piguerra, A. L. (2005). Personal and Professional Attributes and Management Capabilities of Public Elementary School Heads in the Division of Panabo City. (Unpublished Master's Thesis, NDU, Cotabato City).
- [84] Roul, S. K. (2012). Practice and Problems of Principals' Leadership Style and Teachers' Job Performance in Secondary Schools of Ethiopia, *An International Multidisciplinary Peer Reviewed and Journal*, Vol. 1, Issue 4, 227-243.
- [85] Russell, M., Bebell, D., O'Dwyer, L. & O'Connor, K. (2003). Examining teacher technology use: Implications for pre-service and in-service teacher preparation. *Journal of Teacher Education*, 54(4), 297-310.
- [86] Russell, M., O'Dwyer, L. M., Bebell, D., & Tao, W. (2007). How teachers' uses of technology vary by tenure and longevity. *Journal of Educational Computing Research*, 37(4), 393-417.
- [87] Sabado, N. (2014). The Influence of Leadership Behavior of School Heads to the Performance of Public and Private High School Teachers in Kidapawan City Division, Dissertation.
- [88] Silberman, C.E. *Crisis in the Classroom: The Reading of American Education*. New York: Random House, 1971.
- [89] Spence, Sarah Ann. "The Presence of and Relationships between Helping Elements and Task Steps in Post-observation Supervisory Conferences." Ed.D University of Missouri-Columbia, 1988. 215 pp. (49/10-A:2887).
- [90] Stapleton. Virginia Marie. "A Study of Instructional Supervisors and Their Perception of Job related Stress." Ed.D. University of Georgia, 1988. 126 pp. (49/05-A.1028).
- [91] Street, Mary Sue. "An Investigation of the Relationships among Supervisory Expertise of the Principal, Teacher Autonomy, and Environmental Robusiness of the School" Ph.D. The Louisiana State University and Agricultural and Mechanical College, 1988. 159 pp. (50/50-A.1172).
- [92] Strike, Christine Alice. "Supervisors' Implementation of Trained Information regarding Broad Questioning and Discussion of Supervision during Their Supervisory Conference in Speech-Language Pathology." Ph.D. Indiana University, 1988. 214 pp. (49/09-B:3710).
- [93] Szolnoki, John Frank. "Directors' and Supervisors' Perception of the Supervisor's Role in Nonpublic Special Education Settings." Ed.D. Columbia University, 1988. 183pp. (49/06-A:1339).
- [94] Seyyedi, S. M., & Izadi, A. (2009). The relationship between leadership style and organizational commitment to staff police the province. *Journal of Police Science*. Year XII, Issue I, 112-109.
- [95] Shennu. B. (2010). Participative leadership. Access @ [http://www.ehow.com/list\\_417305](http://www.ehow.com/list_417305). Retrieved on 12 June 2011.
- [96] Snelbecker, G. E. (1999). Some thoughts about theories, perfection and instruction. In C. Reigeluth Mahwah (Ed.), *Instructional-design theories and models*. New Jersey/London: Lawrence Erlbaum.