School Leadership Instructional and Transformational Typology

Yi Chen

Teachers College, Columbia University

Refection Four for Research, Theory, and Practice in Education Leadership

School Leadership Instructional and Transformational Typology

# The purpose of this reflection paper is to explore the possibility of clarifying the differences between instructional leadership and transformational leadership in practice. This paper will focus on the research of Urick & Bowers (2014). In the comprehension and evaluation section, I will summary their study based on the theory, methods, and findings. Additionally, I will illustrate the successes and limitations of this research. In the application section, I will talk about the shared instructional leadership practice in China.

# Comprehension & Evaluation

# Theory

# The theory of Urick & Bowers (2014) is based on previous researches. Transformational leadership, instructional leadership, and shared instructional leadership are compared based on the core leadership behaviors (e.g., communicating mission, promoting professional growth, and building sense of community). The previous literature, to some extent, has clarified the main differences between these “idealized” leadership style in theory. For example, transformational leadership emphasizes motivation, individual consideration, and influence. Instructional leadership pays attention to goal, professional development, visibility, and evaluation. While shared instructional leadership lay stress on supportive climate, shared decision, and relationship. However, these leadership styles have many conceptual overlap and similarities. Besides, the differences between these leadership styles in practice are not clear. This is the main question that Urick & Bowers (2014) what to explore through finding the empirical evidence from data.

# Methodologies

This study applied the latent class model with the cross-sectional survey data (Staffing Survey collected by the National Center for Education Statistics). The independent variables related to social and school context, and principals’ background explains the latent class. The types of principals are the mediated variable, which are identified by the survey data. Principal perceptions of leadership are the dependent variables, which define the different latent classes in two dimensions: principal perception of principal leadership and principal perception of shared leadership with teachers.

The latent class model is one subset of the latent variable model (e.g., structure equation model) which aims at relating a set of observed (usually discrete data, like the Likert- type survey data) multivariate variables to a set of latent variables (Lazarsfeld & Henry, 1968). A class is characterized by the patterns of conditional probabilities that indicate the variable take on certain latent groups (Formann, 1984). The estimation is usually based on maximum likelihood (robust maximum likelihood estimation in this study is a subset of maximum likelihood methods). Latent class analysis, under the broad definition in machine learning, is also a subset of the clustering problem (group the dataset without the supervised term). Other popular clustering methods includes K-Means, Mean-Shift, Expectation-Maximization (EM), and hierarchical clustering. The uniqueness of latent class model are: (1) this model is a distribution-based model (unlike the other nonparametric approaches), which could apply the conventional statistical testing straightforwardly; (2) this model is under the framework of structure equation model, which has the flexibility of building the model assumption based on the theories. Another extension of the latent class model is to apply for the mixed membership among the clusters (Airoldi, Blei, & Fienberg, 2009).

However, for any clustering problem, the number of the class is always assumed to be prior. In this study, the model selection is based on information theory methods: AIC and BIC. These matrices basically selection the model, which optimizes the balance of the explanation power of the model (likelihood) and the complexity of the model (number of parameters). Another possible approach is using a semi-parametric method (e.g., the Chinese Restaurant Process) to automatically identify the number of clusters (Aldous, 1985).

# Findings

There are three types of leadership styles integrating, controlling, and balkanizing. More than half of the samples are identified as integrating. The meaning of these latent classes is defined by summarizing the patterns of the samples for each class in raw data, and linked these patterns with the previous studies (Marks and Printy, 2003; Nylund, Bellmore, Nishina, & Graham, 2007). Integrating principals practiced both high transformational and high shared instructional leadership. While controlling principals had midlevel transformational leadership and low shared instructional leadership. Balkanizing principals had slightly higher shared instructional leadership compared to controlling principals but less transformational leadership.

Additionally, the balkanizing principals ceded both instructional and managerial leadership to teachers, whereas controlling principals more often withheld leadership from teachers. These differences in school leader types can be partially explained by the school’s structural characteristics as well as principal background (e.g., gender).

Finally, the school context helps predict different types of principals. For example, integrating principals reported a larger number of faculty teaching to high academic standards and a lower social disorder. While balkanizing principals were often male in small, rural schools with fewer minority students and less often had and met state or district goals.

# Successes

# The successes of this study are two-folded. On the one hand, this provides the empirical evidence of how popular leadership style is really applied in reality. Three significantly different types of U.S. principals are defined based on principals’ perceptions. And these three styles are measured in a multidimensional approach (transformational and shared instructional leadership). This approach represents the reality that principals applied both theories in a mixed way according to the social and school context. On the other hand, this study provides an example of applying and interpreting the latent class models in typology research in educational leadership. Based on the different data sources, the findings will vary. However, their methodologies can be used for many other typology studies.

# Limitations

This study is based on Staffing Survey data (1999-2000). As the researchers recognized, the data source is over ten years old, and it has difficulty explaining the new tendency in educational leadership. Staffing Survey is a long-term project which contains the data from 1978 to 2011. As Prestin and Scott Nelson (2005) recommended, longitudinal data (e.g., repeated surveys and measure) should be used for quantitative research. It will be helpful if this study can show how the latent class of leadership style involves overtime. However, I also notice that the construct of the survey changes over time. This may put a challenge to the consistent measurement of typology analysis. Besides, this research focus on exploring the implication of leadership in reality. But it does not further explore how different leadership styles impact student learning. This may because this study did not obtain the corresponding assessment data of students in the Staffing Survey data.

# Application

In this section, I want to discuss the shared instructional leadership in China based on my personal experience. In particular, I want to explore how professional learning communities are developed (PLC). The PLC is fashionable in China, with a notable growth of research on PLCs in the past decade (Qiao et al., 2017).

Although various conceptualizations of the PLC exist, many researchers have argued that the components of an effective PLC include five aspects. The first aspect is shard valued and well-defined goals. In China, *Professional Standards for Compulsory Education School Principals* proposes six professional responsibilities of principals, and the first one is setting the school development plan and clear goal (Liu et al., 2017). Since the Chinese educational system relies on the performance of standardized testing and the requirement coming from the educational department in the central government, the objects of teaching and learning usually are clear and measurable both in the short-term and long-term. However, this may also bring the problem of biased, incomplete, and even misleading objects. Students, parents, teachers, and even many school principals do not have the chance to be involved into the plan setting process.

The second aspect is a collaborative activity. The community members discuss the knowledge and skills related to teaching through collaboration to create shared understandings about teaching. For example, the subject-based teaching research group is a popular implementation in China at the national, provincial, county, district, and school levels (Paine and Fang, 2006; Qiao et al., 2017). This implementation is not just for K12 education. It is also applied into higher education. Subject-based teaching research group allows teachers to routinely work together with a focus on instructional issues and student learning. For example, I remember my biology teacher once brought many insect specimens into the class after he noticed that other biology teachers were using the specimens. Teachers in the same subject usually will have at least one weekly meeting for sharing and making the decisions together. I noticed that after my biology, other teachers also found that insect specimens helped students learn in the class. The subject-based teaching research group decided to bought specimens together for future teaching and learning.

The third aspect is the collective sense of focus on student learning. The previous example already shows the collaboration of teachers usually focuses on student learning. In particular, there are many standardized assessments of students at least every semester (sometimes even every week or month). There are many competitions among teachers since the performance of students is related to their bonus and reputation. Besides, the teacher group is not just subject-based. Teachers for the same grade or same class also have different groups. We usually have one headteacher for the whole class, one headteacher for the subject, and one header teacher for the whole student in the same grade. Thus, there are at least three types of teacher group which shared the common goal: improving the performance of students. The assessment of teachers sometimes is connected. For example, if the overall performance of students from one specific class is low, the header teacher for that class should take the main responsibility. He needs to figure out the solution. Then different teachers who teach the student in this class will be required by the class header teachers to launch the new plan together. The competitions are not just at the school level. Since the standard testing is usually shared with the schools in the same area, the rank of school for different subjects and overall performance will be public and shared. However, this may also lead to the malign competition, which ends up with the overwhelming pressure on the students. For example, every subject teacher tries to give more homework to the student.

Forth aspect is de-privatized practices or sharing individual practices. China has already formed a multilevel (department, school, district, municipal/provincial, national) teaching research system (*jiaoyanxitong*). Activities such as collective lesson preparations (*jitibeike*), public lessons (*gongkaike*), and observing and evaluating each other’s class (*tingpingke*), are prevalent and embedded in teachers’ daily work (Paine and Ma, 1993; Wong, 2010; Zhang and Pang, 2016).

The last one is reflective dialogue. In the previous examples, we already see how professional conversation is directed at specific issues surrounding the instructional practice. Here, I want to introduce another important reflective dialogue: parent-teacher meeting. During the K12 period, we have parent-teacher meetings at least one time a semester. Usually, this meeting is not held at the beginning or the end of the semester. Instead, the meeting usually holds after the midterm exam. This gives the teacher and parents an opportunity to share the feedbacks. Thus, parents sometimes are also involved in professional learning communities. Parents can provide the information of students in time and usually are required to help the students for the homework (at least monitor and make sure the homework is finished). When I was in elementary school, the headteacher of the class will list all the homework from different subjects on one paper. Then I need to bring this paper to my parents, ask them to sign their names, and then bring it back to school with my homework. Sometimes, we are required to read some articles or reciting English vocabulary. This type of homework will be checked by the parents.

I have no clear answer to whether these practices indeed help the Chinese student learn and develop. On the one hand, I benefit from it since I developed good study habits and a diligent personality. On the other hand, I have to face great pressure since the first grade. I am lucky, while some other students may correspondingly lose their learning interest or even has psychological issues.

References

Dimmock, C. (1995). Principals and School Restructuring: Conceptualizing Challenges and Dilemmas. Journal of Educational Administration, 441-462.

Leithwood, K., Seashore K., Anderson S., & Wahlstrom K., Center for Applied Research and Educational Improvement Report (2004). *How Leadership Influences Student Learning*, Retrieved from <https://www.wallacefoundation.org/knowledge-center/Documents/How-Leadership-Influences-Student-Learning.pdf>

Susan M. J., (2004) *Helping Teachers Learn: Principal Leadership for Adult Growth and Development*, Oaks, California: Corwin Press

Driscoll, M.E., Goldring, E.B. How can school leaders incorporate communities as contexts for student learning? P.61-80

Firestion, W.A., Shipps, D. How do leaders interpret conflicting accountabilities to improve student learning? P. 81-100

Stogdill, R. R. (1948). Personal Factors associated with leadership: A survey of the literature. *The Journal of psychology*, 25: 35-71

Mann, R. D. (1959). A Review of the Leadership between Personality and Performance in Samll Group, *Psychological Bulletin*. 56

Zaccaro, S. J., Kemp, C., & Bader, P. (2004). *Leader traits and attributes*. In Antonakis, J., Cianciolo, A. T., & Sternberg, R. J. (eds.), *The Nature of Leadership*, Sage, Thousand Oaks, CA, pp. 101-124.

Bales, R. F. (1951). *Interaction process analysis: A method for the study of small groups*. Addison-Wesley, Reading, MA.

Urick, A., & Bowers, A. J. (2014). What Are the Different Types of Principals Across the United States? A Latent Class Analysis of Principal Perception of Leadership. *Educational Administration Quarterly*. <https://doi.org/10.1177/0013161X13489019>

Lazarsfeld, P.F. and Henry, N.W. (1968) *Latent structure analysis*. Boston: Houghton Mifflin

Formann, A. K. (1984). *Latent Class Analyse: Einführung in die Theorie und Anwendung* [*Latent class analysis: Introduction to theory and application*]. Weinheim: Beltz

Aldous, D. J. (1985). "*Exchangeability and related topics". École d'Été de Probabilités de Saint-Flour XIII* — 1983. Lecture Notes in Mathematics. 1117. pp. 1–198. doi:10.1007/BFb0099421. ISBN 978-3-540-15203-3.

Airoldi, E. M., Blei, D. M., Fienberg, S. E., & Xing, E. P. (2009). Mixed membership stochastic blockmodels. *Advances in Neural Information Processing Systems 21 - Proceedings of the 2008 Conference*. <https://doi.org/10.1145/1390681.1442798>

Qiao, X, Yu, S, Zhang, L (2017) A review of research on professional learning communities in mainland China (2006–2015): Key findings and emerging themes. *Educational Management Administration & Leadership*. Epub ahead of print on May 11, 2017. DOI: 1741143217707523