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# International Dialogues on Education

## Past and Present

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2019, Volume 6, Number 2, edited by Arthur K. Ellis

### ELLIS

Educational Innovations in Countries Around the World: Editorial Comments on the Contributions to a Symposium

### SCHRADER

Continuity and Change in Societies in Post-Socialist Transformation: Research into Households and the Economy

### GOLZ, GRAUMANN, & WHYBRA

The Humanization of Education: Some Major Contemporary Challenges for an Innovative Concept

### WINZER & MAZUREK

Inclusive Schooling for Students with Disabilities: Redefining Dialogues of Diversity and Disability in the Canadian (Alberta) Agenda

### OBERLECHNER

Fluidity and Education

### GRAUMANN

Backgrounds and Goals of 'Innovations': The Examples of New Math in the 1960s and the Change from Input to Output 1995

### ZHOU

Collective Teacher Efficacy: An Introduction to Its Theoretical Constructs, Impact, and Formation

### RASIKAWATI

Corpus-Based Data-Driven Learning to Augment L2 Students' Vocabulary Repertoire

### HENRIKSON

Building Purposeful Superintendent and School Board Relationships Through Examining the Historical Narrative of Evolving Roles

### RICHARDSON, STENQUIST, & STENQUIST

Experiential Learning in Business Communication: Starting a Peer-Reviewed Student Journal and Podcast

### EBERSOLE

Preservice Teacher Experience with Technology Integration: How the Preservice Teacher's Efficacy in Technology Integration is Impacted by the Context of the Preservice Teacher Education Program

### HOWE

Does Metacognitive Reflection Benefit Art Students?

### JOSEPH

Arts and Academic Achievement—Empirical Evidence for Arts Realities in United States Education Law and Around the World

### WATERKAMP

An Obituary for Götz Hillig (15 February 1938 - 6 June 2019), the Important Makarenko Researcher

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<i>Arthur Ellis</i> Educational Innovations in Countries Around the World: Editorial Comments on the Contributions to a Symposium	6-10
<i>Heiko Schrader</i> Continuity and Change in Societies in Post-Socialist Transformation: Research into Households and the Economy	11-29
<i>Reinhard Golz, Olga Graumann, &amp; David Whybra</i> The Humanization of Education: Some Major Contemporary Challenges for an Innovative Concept	30-42
<i>Margaret Winzer &amp; Kas Mazurek</i> Inclusive Schooling for Students with Disabilities: Redefining Dialogues of Diversity and Disability in the Canadian (Alberta) Agenda	43-51
<i>Manfred Oberlechner</i> Fluidity and Education	52-62
<i>Günter Graumann</i> Backgrounds and Goals of 'Innovations': The Examples of New Math in the 1960s and the Change from Input to Output 1995	63-68
<i>YaRu Zhou</i> Collective Teacher Efficacy: An Introduction to Its Theoretical Constructs, Impact, and Formation	69-82
<i>Ira Rasikawati</i> Corpus-Based Data-Driven Learning to Augment L2 Students' Vocabulary Repertoire	83-98
<i>Robin L. Henrikson</i> Building Purposeful Superintendent and School Board Relationships Through Examining the Historical Narrative of Evolving Roles	99-111
<i>Marianna Richardson, Ryan Stenquist, &amp; Jennifer Stenquist</i> Experiential Learning in Business Communication: Starting a Peer-Reviewed Student Journal and Podcast	112-123

<i>Liz Ebersole</i> Preservice Teacher Experience with Technology Integration: How the Preservice Teacher's Efficacy in Technology Integration is Impacted by the Context of the Preservice Teacher Education Program	124-138
<i>Eric E. Howe</i> Does Metacognitive Reflection Benefit Art Students?	139-163
<i>AnnRené Joseph</i> Arts and Academic Achievement—Empirical Evidence for Arts Realities in United States Education Law and Around the World	164-198
<i>Dietmar Waterkamp</i> An Obituary for Götz Hillig (15 February 1938 - 6 June 2019), the Important Makarenko Researcher	199-200

*Arthur K. Ellis*

## Educational Innovations in Countries Around the World: Editorial Comments on the Contributions to a Symposium

This thematic issue of *International Dialogues on Education: Past and Present*, is dedicated to the topic of educational innovation. The articles contained in these pages focus on innovations in various forms, from pedagogical, to administrative, to technological. The articles are based on presentations made presenters at the 10<sup>th</sup> Biennial *Symposium: Educational Innovations in Countries around the World*, held on the campus of Seattle Pacific University, June 24-27, 2019. The symposium featured presenters from 12 countries and three continents.

\* \* \*

Innovation is a broadly conceived topic, one that has captured the educational imagination for decades. The English term “innovation” comes from the Latin word *novus*, which means new or novel. Thus, an innovation is somehow different from what has gone before. It is tempting to think of new as “improved” or “better than old,” but it is not always the case that the valence is positive. The shores of education are littered with such shipwrecks as The New Math, Learning Styles, and Competency-Based Education, to name a few. Each of these three were highly touted at the time of their inception, but none of them has made its way into the curriculum. This is not to say that they were without merit. Why innovations succeed and fail is never an easy thing to determine. On the other hand, Piagetian Programs, Classroom Discussion, and Teacher Efficacy appear to be innovations that show continued promise. But it is well to keep in mind that teaching and learning in school settings is always situational, and other considerations inevitable temper the value of even the most promising innovations.

In his seminal book, *Diffusion of Innovations*, Everett Rogers points to innovations that seem to work, but only if the contextual setting supports them. He provides the reader with the example of an outside team of experts who came to a remote Peruvian mountain village because the water system had become unpotable. The experts were able to identify the problem and to correct it. However, the villagers refused to use the “new” and “improved” well. This was because the experts had not consulted with the village shaman, whose inclusion was a necessary condition of village life. If this sounds quaint, consider the example of the “New Math,” an education innovation arising in the USA in the post-Sputnik era of the early 1960s. The New Math, which was transformational in the sense that in place of rote memory work such as memorizing multiplication tables, students were taught symbolic logic, number bases (other than base 10), and modular arithmetic. As in the case of the well-water replacement done by outside experts in the Peruvian village, outside experts imposed a curriculum that parents and elementary school teachers did not understand. In other words, the innovation was imposed on them without their consultation, and even without proper training. This innovation quickly went away. Teachers abandoned the new textbooks and used copy machines to produce old-style arithmetic problems. Like the new well water, the new math was in fact quite good. But the acceptance rate at local levels was dismal.

Educational innovations come in various forms: pedagogical, technological, and sociological, to name three such. Given the dense refractory nature of school culture, all three forms must be taken into account for an innovation to be sustainable. One question to ask of any educational innovation is that of the extent to which it actually improves teaching and learning. But even this involves a number of factors, including empirical evidence, cultural compatibility, and adaptability to different contexts. Two pedagogical examples come to mind as successful exemplars: cooperative learning and team teaching. Cooperative learning, as premier developers/researchers David and Roger Johnson readily concede, is an old idea; most innovations are. But old ideas in new forms are often an effective way to innovate. Cooperative learning involves student-to-student interaction and teamwork, two qualities so sadly missing in many classrooms where so often, as John Goodlad has noted, “student come to school to learn alone in groups. The empirical evidence is there, both cognitive and affective. Documented claims regarding cooperative learning results include “improved academic achievement, improved behavior and attendance, increased self-confidence and motivation, and increased liking of school and classmates.” (U.S. Office of Research and Consumer Guide, #1, 1992).

Team teaching is yet another example of an educational innovation that has achieved sustainability. Decades ago, David Anderson and John Goodlad at Harvard developed a model wherein teachers meet with each other to consider cooperatively the strategic elements of a lesson. In some cases, the teachers would actually team-teach a lesson to several classes of students who were assembled in a larger room. However, the crucial element appeared to be the cooperative sharing done by the teachers who in most cases taught lessons to their individual classes. Over time, focus has shifted to Japanese Lesson Study, a method in which teachers work together to plan a given lesson carefully, including instruction, coverage, and assessment. Such reflection and exchange of ideas by teachers creates community and structure to teaching and learning. Another variant is the more recent implementation in American schools of Professional Learning Communities in which teachers meet to discuss, plan, and assess the learning of their students.

These two examples are success stories in innovation. On the other hand, as the celebrated Spanish poet Antonio Machado once noted, “Out of every ten innovations attempted, all very splendid, nine will end up in silliness.” Whatever happened to Whole Language, Learning Styles, Multiple Intelligences, Outcome-based Education, Self-Esteem, Open Schools, Values Clarification, to name but a few innovations of recent times? The answer is that they appeared and disappeared for one reason or another, most typically because of lack of empirical evidence and/or user satisfaction. I once attended a national conference in which a keynote speaker dramatically proclaimed Outcome-Based Education (OBE) to be the educational equivalent of penicillin. Penicillin is still around, but OBE is at best a distant memory. This is not to say that the innovations mentioned here as well as countless others were of no value. Like the New Math, they may have had their strong points. But they failed to pass the important tests of either or both improved academic achievement and social/cultural compatibility.

Cooperative Learning and Team Teaching (and its current incarnations in the forms of Lesson Study and Professional Learning Communities) are examples of innovations that are pedagogical in both an academic *and* social sense. They are remarkable in that they fit two categories of educational significance. They also have economic appeal since they bring with them little or no additional monetary costs.

Beyond academic and social issues are those of rapid developments in technology. Any number of educational innovations have come from sources not solely connected to schools. The personal computer and the internet are premier examples. These two technologies, taken together, have transformed access to information. This transformation is as basic as that which followed the invention of the printing press and moveable type some centuries ago. It is one thing for an institution to have one hand-copied

version of a book It is yet another thing for millions of print copies of the same book available to a world-wide audience. A generation ago, a school library was the repository of knowledge with its sets of encyclopedias, books of fiction and nonfiction, even films. The school (and the local public library) were where you had to go. They were central places. But the computer and internet have decentralized access to information. More than one futurist has noted that not only have schools lost their centuries-old monopoly on teaching and learning, but that in many cases they are places where older teachers know less than younger students how to navigate the information highway. This is not to suggest that schools will go away. But it is to suggest that they will have to change what they do and how to do it in the coming years. Ask any school librarian what has happened to the school library in recent times. Many school libraries today look more like coffee houses or tea rooms where students meet socially and discuss what they are doing and learning, and less like places of eerie quietude with people silently reading or browsing the shelves. At the tables one sees more laptops and I Pads than books.

\* \* \*

13 contributions have been reviewed and selected for this issue of *International Dialogues on Education: Past and Present*. The authors present different articles, loosely connected one to another by the theme of educational innovation. The articles include carefully considered thoughts that range from pedagogics to policy.

In our lead article, **Heiko Schrader** investigates processes of change and continuity in post-Soviet Russia, with reference to his own research and observations regarding the “people’s economy.” A key finding is that of the world of trust in an “us” vs. “them” sense. Pointing to the continuity of a dualistic world in which governments have come and gone, he provides to the reader a window to changes (and lack of changes) in thought and behavior at the level of ordinary people, some of it significant, some of it superficial. His insights bring to mind the French proverb, “plus ca change, plus c’est la meme chose.”

**Reinhard Golz, Olga Graumann, and David Whybra** address significant changes over time with respect to the “humanization of education” that emerged in Russia in the wake of the collapse of the Soviet Union. They focus on issues of national identity, individuality, and, social responsibility. The authors point to the “urgent task” to provide individual and socially responsive learning in an integrated framework, one that limits overemphasis on national interests and other dehumanizing tendencies.

**Margret Winzer and Kas Mazurek** investigate the issues that lie at the intersection of diversity, disability, and inclusive schooling in the Canadian province of Alberta. They focus on what the authors contend is a “tendency to conflate disability with diversity as expressed by the UNESCO versions of inclusive schooling....” This tendency, they argue, has created a “sustained muddle of intent” in Alberta’s schools.

**Manfred Oberlechner** explores the concept of fluidity in life-long learning processes. Harkening back to the progressive maxim of educating the “whole child” or person, he writes convincingly that ongoing developmental growth throughout a lifetime opens doors. He argues that sustained life-long learning offers new perspectives for pedagogy in such realms as the cultural, intellectual, creative, and practical. This possibility is, of course, greatly enhanced through access to new and emerging technologies that the progressives of John Dewey’s time could only have dreamed of.

**Günter Graumann’s** thoughtful premise is that each educational innovation should be questioned critically, particularly with regard to its potential to achieve progress in the humanization of education. He reminds the reader that innovation does not necessarily result in improvement. Two examples he cites are the New Math and the OECD-sponsored TIMMS and PISA studies. The resultant change from inputs to outputs, he thoughtfully suggests, is fraught with imminent peril.

**YaRu Zhou** addresses the much-overlooked topic of *collective* teacher efficacy. Her writing includes an axis that extends from theoretical construct to empirical evidence. She carefully includes discussion of cross-cultural perspectives, especially since Western societies are often thought of as emphasizing individual effort and performance as opposed to Eastern societies where collective efforts are often more prized. She carefully defines/describes efficacy and provides related empirical findings regarding school-based achievement.

**Ira Rasikawati** explores the theory and research bases of corpus-based Data-Driven Learning (DDL) on second language acquisition by school students. She cites and synthesizes the empirical evidence in support of DDL in second language learning, particularly in English for Academic Purposes (EAP) courses in non-English speaking countries. She addresses the question of why DDL is not widely adopted in spite of efficacious research findings to support it.

**Robin Henrikson** summarizes the changing role of that uniquely American school officer and leader, the School District Superintendent. She addresses the dynamic between the School Superintendent and another slice of American, the School Board. Superintendents are selected. School Board Members are elected. But they have to work together. She argues for strategic levels of collaboration between Superintendent and School Board, foremost by clarifying their respective roles, duties, and obligations.

**Marianna Richardson, Ryan Stenquist, and Jennifer Stenquist** present an intriguing model of greatly expanded student engagement in university-level business courses and programs. In particular, they argue for practical, real-world experiences that connect to the realms of business management and communication. Tying theories to practice, they offer a case study in university coursework that makes theory-to-practice connections through a student-led peer-reviewed journal and podcast for business students.

**Liz Ebersole** links three pedagogical theories: self-efficacy, self-determination, and situated learning with the International Society for Technology in Education (ISTE) standards for educators and the Technological Pedagogical Content Knowledge Framework (TPACK) framework. Her purpose in doing so is to explore the potential to inform preservice teacher education, both coursework and field experience. She raises the important question of context provided to student teachers by mentor teachers with respect to the use of technology in school settings.

**Eric Howe's** quasi-experimental study of the effects of metacognitive reflection on vocabulary development offers possibilities that such reflection is efficacious. He tested the effects of metacognitive reflection (MR) and teacher feedback on learning academic language, in this case in the arts. While the study shows promise, it is clear that continued research in this area is much needed.

**AnnRené Joseph's** experimental study, also in arts education, used creative dramatics activities as a means of increasing students' arts vocabularies. Her careful attention to random assignment of students and teachers as well as consistent monitoring of the intervention gives credence to her conclusion that the statistically significant achievement results favoring drama as a means of developing vocabulary is warranted. Of interest is her observation that federal law in the United States encourages and requires arts experiences in elementary school settings.

Finally, and of significance, is **Dietmar Waterkamp's** commemoration of Gotz Hillig (1938-2019), a German contributor to comparative education and an important researcher regarding the life and work of Anton Makarenko (1888-1939), a visionary Russian educator, social worker, and theorist who promoted democratic thought and practice in education.

\* \* \*

I wish to express my gratitude to the authors of these studies in educational innovation. The scale of their work ranges from the classroom to the central administration in school settings, and beyond to

state, provincial, and national levels. I also wish to thank Reinhard Golz, Editor-in-Chief of *International Dialogues on Education: Past and Present*, for providing me with this opportunity to serve as Editor-in-Chief of this special issue.

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Heiko Schrader (Germany)

## Continuity and Change in Societies in Post-Socialist Transformation: Research into Households and the Economy

**Abstract:** Starting from the distinction between short-term system transition (new institutional economics, political science) and system transformation as a long-term process of societal change, the author argues that institution-building is a long-term and complicated process and that informal institutions of everyday life do not change as quickly as the newly implemented formal ones. The author has a particular interest in the people's economy of everyday life. He takes a look at three empirical research projects he conducted between 1997 and 2016, investigating whether informal institutions still undermine formal ones that are necessary for the functioning of a market economy. The research projects show particular characteristics. (1) a clear-cut double morality between bureaucracy and the rich, on the one hand, and the small people who have to protect themselves, on the other. (2) It is advantageous to know somebody in the lower bureaucracy (blat or other forms of bribery in everyday life). (3) Agents place strong reliance on personal face-to-face networks, including family networks, and avoid formal institutions. Indeed, many findings of the author support continuity even after almost 30 years of post-socialism, while some changes to the market society occur among better-off people.

**Keywords:** transition, transformation, continuity and change in post-socialism, morality, people's economy

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**摘要** (Heiko Schrader: 在后社会主义转型社会中的持续性和变化：关于私人 家政和国民经济的研究): 基于短期性的系统过渡 (新机构经济学, 政治学) 与作为在长期社会变迁过程中的系统过渡之间的区别, 作者认为机构建设是一项漫长而艰难的过程, 日常生活中非正式的机构不能像新实施的正式机构那样任其迅速改变。作者对日常经济学尤为感兴趣。他观察了 1997 年至 2016 年的三项实证研究, 并分析了非正式机构是否继续阻碍那些对于发挥市场经济的功能具有必要性的正式机构。研究显示三大特征: (1) 一方面, 对于官僚主义和富人而言, 这是一个明确的双重道德标准。另一方面, 对于“小人物”, 他们必须在前者面前保护自己。(2) 认识低官僚级别的人 (日常生活中的行贿和其他形式的行贿) 是有益的。(3) 参与机构依靠以个人人脉为基础的网络 (包括家庭人脉), 而避免正式的机构。这样的话, 许多指标则表明了在近 30 年之后的后社会主义的持续性, 而某些变化, 尤其是在富人当中还可以观察到

**关键词:** 后社会主义的过渡, 转型, 持续性和变化, 道德, 日常经济学

**摘要** (Heiko Schrader: 在後社會主義轉型社會中的持續性和變化：關於私人 家政和國民經濟的研究): 基於短期性的系統過渡 (新機構經濟學, 政治學) 與作為在長期社會變遷過程中的系統過渡之間的區別, 作者認為機構建設是一項漫長而艱難的過程, 日常生活中非正式的機構不能像新實施的正式機構那樣任其迅速改變。作者對日常經濟學尤為感興趣。他觀察了 1997 年至 2016 年的三項實證研究, 並分析了非正式機構是否繼續阻礙那些對於發揮市場經濟的功能具有必要性的正式機構。研究顯示三大特徵: (1) 一方面, 對於官僚主義和富人而言, 這是一個明確的雙重道德標準。另一方面, 對於“小人物”, 他們必須在前者面前保護自己。(2) 認識低官僚級別的人 (日常生活中的行賄和其他形式的行賄) 是有益的。(3) 參與機構依靠以個人人脈為基礎的網絡 (包括家庭人脈), 而避免正式的機構。這樣的話, 許多指標則表明了在近 30 年之後的後社會主義的持續性, 而某些變化, 尤其是在富人當中還可以觀察到。

**關鍵詞:** 後社會主義的過渡, 轉型, 持續性和變化, 道德, 日常經濟學

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**Zusammenfassung** (Heiko Schrader: *Kontinuität und Wandel in post-sozialistischen Transformationsgesellschaften: Forschungen zu Haushalten und zur Volkswirtschaft*):

Ausgehend von der Unterscheidung zwischen kurzzeitiger Systemtransition (Neue Institutionenökonomik, Politikwissenschaft) und Systemtransformation als Langzeitprozess sozialen Wandels argumentiert der Autor, dass Institutionenbildung ein langer und schwieriger Prozess ist und dass informelle Institutionen des Alltags sich nicht so schnell verändern lassen wie die neu implementierten formellen Institutionen. Der Autor hat ein besonderes Interesse an der Alltagsökonomie. Er betrachtet drei empirische Forschungen aus den Jahren 1997-2016 und analysiert, ob informelle Institutionen weiterhin die formelle behindern, die für die Funktion einer Marktwirtschaft notwendig sind. Die Forschungen zeigen folgende Charakteristika: (1) Eine deutliche Doppelmoral hinsichtlich Bürokratie und Reichen auf der einen Seite und dem "kleinen Mann" auf der anderen, der sich vor ersterer Gruppe schützen muss. (2) Es ist vorteilhaft, jemanden aus der unteren Bürokratieebene zu kennen (brot und andere Formen der Bestechung im Alltag). (3) Akteure verlassen sich auf persönliche gesichtsabhängige Netzwerke (was Familiennetzwerke beinhaltet) und vermeiden formelle Institutionen. So sprechen viele Indikatoren für Kontinuität nach fast 30 Jahren Postsozialismus, während einige Veränderungen insbesondere bei wohlhabenden Menschen zu beobachten sind.

**Schlüsselwörter:** Transition, Transformation, Kontinuität und Wandel im Postsozialismus, Moralität, Alltagsökonomie

\* \* \*

**Аннотация** (Хайко Шрадер: *Непрерывность и трансформации в постсоциалистических обществах: исследования частных и национальных экономик*): Исходя из различий между краткосрочной транзицией той или иной системы (новая институциональная экономика, политология) и трансформацией системы как длительного процесса социальных изменений автор полагает, что создание организаций – длительный и сложный процесс, и что не-институциональные структуры подвергаются изменениям не так быстро, как имплементированные в новые условия институциональные образования. Особый акцент автор делает на исследовании т. н. домашней («бытовой») экономики. Рассматриваются три эмпирических исследования, проведенных в период с 1997 по 2016 гг., проводится анализ того, тормозят ли не-институциональные структуры развитие институциональных, которые необходимы для успешного функционирования рыночной экономики. Исследования показали следующее: (1) Четко профилирующаяся двойная мораль в дискурсе бюрократии и богатых, с одной стороны, и «маленьким человеком», который вынужден защищаться от первой группы, с другой. (2). «Выгодно» знать кого-либо из нижнего яруса чиновничьей иерархии (блат, другие формы коррупции) (3). Субъекты полагаются больше на личные связи (включая т. н. семейственность») и избегают институциональные структуры. Таким образом, многие показатели указывают на непрерывность данных процессов спустя почти тридцать лет как начался постсоциалистический период, хотя некоторые изменения все-таки наблюдаются: прежде всего это касается состоятельных граждан.

**Ключевые слова:** транзиция, трансформация, непрерывность и трансформации в постсоциалистический период, нравственное поведение, домашняя экономика

## Introduction<sup>i</sup>

The market societies of Western Europe, their rationally acting institutions and organizations, and the politico-economic framework in which they function emerged in an 'instituted' (Polanyi, 1978; Martinelli, 1987) process of economic and social change. Modernization theory held that this historical process was a blueprint for the same processes occurring with a time lag in developing countries, which would eventually catch up with the West.

For the specific case of communist countries this theory assumed that modernization was blocked and that sooner or later the Soviet Union would implode due to the inherent systemic contradictions (Parsons, 1951; 1982). But indeed, nobody expected that this would happen so quickly (1989-1991). With these political events modernization theorists and among them

particularly political scientists recaptured the theoretical and political mainstream thinking by shaping the term of transition - a short-term institutional systemic change, which would bring the former socialist societies back into Europe (Olson, 1995; Poznanski, 1995; Zloch-Christy, 1998; Beyer et al., 2001). Market-systemic institutions such as private property, private banks, the insurance business, etc. have to be implemented to engender (Olson, 1995) the self-adjusting market and democratic societies. The keywords here were 'model-transfer' and 'capitalism according to design' (Kollmorgen, & Schrader, 2003).

Such an orthodox perspective on transition prognosticated a relatively short and difficult transitional period of structural adjustment, (topics such as 'shock therapy' and 'valley of tears' were common but in practice varied in a number of countries) with privatization of state property, rapid incorporation into the world market, emergent flourishing industrial and commercial landscapes, rapid rise of per-capita incomes, and the like. Institution-building, however, is more difficult than assumed in these neoliberal/neoclassical approaches of such a 'designer capitalism'. In line with various institutionalists who consider actor-structure dynamics (Schimank; 2000) sociologists from Magdeburg University argue that institution-building is a long-term and complicated process. Institutions constitute durable norms, conventions and legal rules that structure human (inter)action and activities in everyday life. According to Douglas North (North, 1991) institutions are socially embedded systems of rules of the game in society; they can be formal and informal. Both have to match each other so that transformation processes work. Empirical social scientists find North's distinction very useful and adapt this conception into their transformation approach for Eastern Europe. They argue that contrary to these designed and implemented formal institutions, informal norms of everyday life do not change as quickly as the newly-implemented formal ones.

This contribution argues that the policy of system-transfer implemented formal market institutions like private property, markets and banks, and a legal framework to make them function. However, it overlooked the informal institutions still at work as an open or hidden agenda. Informal institutions are an outcome of individual and collective biographic experiences, 'collective memory' (Halbwachs, 1967) or 'collective consciousness' (Durkheim, 1984) and behaviours that have engendered a unique "structuration" (Giddens, 1979)<sup>ii</sup> and culture as a 'memory of collective experience' (Tetzlaff, 2000) which even nowadays play a significant role in everyday life (Hann 2002); in other words, such informal institutions work 'path dependently'.

This was foreseen by Stark (1992) and Staniszkis (1992) early on, who were very critical of neo-liberal prognoses. Instead of a rapid transition they feared that a 'continuity in change' (Dittrich, 2001) might occur. In the early transformation phase of Eastern Europe a number of scholars discovered specific hybrid forms of entanglement between policy, bureaucracy and the economy (Åslund, 1995; Stark, 1994), which J. Staniszkis (1995) and M. Tatur (1998) called 'political capitalism': a hybrid societal formation and institutional modus of restructuring socialist societies under conditions of peripheral position<sup>iii</sup>. Other scholars called this period with a weak state monopoly of violence in Russia 'Mafia capitalism' (Hessinger, 2001; Varese, 1994). Both concepts have an understanding of post-socialist path dependent 'pathologies' against the folio of continental Western European (democratic) capitalism; as a sociologist I would argue that, from a global perspective in purely quantitative terms, such types of capitalism (but not the West European continental or Anglo-Saxon types) constitute the norm.

The literature that I have quoted so far originates from the early 1990s to the mid-2000s. However, almost 30 years of transformation have passed, and the question that turns up is whether these informal institutions that undermined formal ones have meanwhile changed or disappeared in the process of intergenerational change (Inglehart, 1989), so that the logic of the market economy is now at work in economic life. Or are these informal institutions still shaping formal institutions in particular ways, perhaps engendering a specifically Eastern European type of capitalism, by nature

fundamentally different? This perspective can be considered as a specification of the VOC (varieties of capitalism) discussion (Hall & Soskice, 2001; Lane, 2007) and will be reviewed at the end of this contribution.

I started working in Russia and doing research in post-socialist contexts in 1997. As an economic and developmental sociologist, I have a particular focus on the people's economy, i.e. how the economy functions in everyday life. I believe that particularly in that field there is a blind spot of knowledge in both economics and economic sociology, because the perspective is mainly on large firms and high price segments. Indeed, the more we work on that high level, the closer we come to economic textbooks, models of rational action, and formal institutions of the market economy. However, the farther we get away from that level and investigate the people's economy, the more relevant becomes the embeddedness of economic action in social structure (Polanyi, 1978; Granovetter, 1992; Hollingsworth, & Boyer, 1997). With regard to the topic of institutional change the people's economy is particularly important because in quantitative terms it covers the majority of people who act in a market economy, so that their informal institutions may indeed influence development and change.

This paper looks at the people's economy of everyday life which I investigated in three of my works. The first one was an outcome of my visiting professorship at the State University of St. Petersburg during the period 1997-1999, where I observed "informal institutions" in everyday life (Schrader, 2004) and investigated pawnshops (Schrader, 2000), the second was a joint research project on small enterprises in Russia, the Czech Republic and Bulgaria in the middle of the 2000s (Dittrich et al., 2006; Dittrich et al., 2008), and the third was a household survey in Central Asia in 2012-2014 (Dittrich, & Schrader, 2015; 2016). This means that, although the research in the different countries covers periods of two to three years, on a whole it concerns a broad period of transformation analyzing similarities and differences, continuity and change. I would like to look at these works one after another.

## Spheres of Trust and Social Capital during the Late 1990s

While teaching at the State University of St. Petersburg from 2007-2009, I observed a number of examples in my everyday life of how formal and informal institutions fell asunder. When I now teach at my home university about informal institutions I can provide various anecdotes of 'how Russia really worked' (Ledeneva, 2006) during that time. On the one hand, we saw a growing market economy in the shopping centres of Saint Petersburg, on the other hand, I experienced how people distrusted market structures in everyday life and instead relied on their established social networks. One of these anecdotes concerns my farewell party at the faculty. I asked a Georgian colleague where to buy some bottles of wine for that party and expected that he would recommend me a wine shop in the city. However, the story took an unexpected direction. First of all, he told me that he needed some time to get the right information. Then he called me back several days later saying he found out that an airplane with good Georgian wines on board had arrived at Pulkovo Airport and that he knew somebody at the customs office ...

Similar anecdotes: The first happened on my arrival with my family. We were immediately advised by my colleagues that, if something happened like theft etc., we'd better not call the police, since "they will take your last shirt". We should also avoid talking to strangers on the phone so that they could not identify us as foreigners. In the streets we should avoid seeking eye contact with people and particularly with policemen, and so on. In my research into pawnshops in St. Petersburg I learned that ordinary people either keep their money at home under the bed or take it to "Sperbank", the state bank, but never trust private banks.<sup>iv</sup>

Everybody who knew Russia during that period probably can tell similar stories. The core issue of these is that people (a) distrusted private institutions of the market economy and (b) had a very negative attitude towards the state bureaucracy and therefore its legitimacy.

I would like to reflect on what was going on as a sociologist (Schrader, 2004). I refer to trust and social capital with regard to their role in the functioning of society. In social science, both the metaphysical and philosophical dimensions of trust have been deconstructed by referring to its function in personal interactions and within society. Luhmann (1988), for example, interpreted trust as a mechanism to reduce insecurity and risk in a very complex modern world. Decision theory and game theory have taken the actor's subjective point of view, by arguing that trust emerges from repeated successful interactions; it is an experience in the trustworthiness of the interaction partner (Axelrod, 1986). This and similar theories explain people's motivation to trust each other through their opportunistic motives as agents.

During the second half of the 1990s, social and economic action in Russian everyday life were very risky due to the fact that formal institutions like justice and law, bureaucracies, and also business partners did not function adequately but were in many cases open to power misuse, bribery and sometimes open or hidden violence; businessmen had to pay protection money to the Russian 'mafia' or to the police. The major stable components in this risky environment were personalized networks. Interactions were limited to such people whom one knew personally or who were recommended by close friends, and who could be controlled by the moral pressure of the network or by 'blat', favours (Ledeneva, 1998; 2006). From my perspective such networks with strict, binding rules and mutual expectations form 'moral economies' (Thompson, 1991; Scott, 1976, Booth, 2004; Evers & Schrader 1994). Such moral economies provide an alternative to market relations in incomplete markets. While they are for sure not the best choice in terms of potential gains, they strongly reduce the high transaction costs of incomplete markets (risk, contracts, monitoring, opportunism, moral hazards) – acting in such personalized networks shows an aversion to risk. Strong ties in networks, however, may at the same time engender insurmountable boundaries, since they shape a dual world view, a sphere of inner and outer morality (Tajfel, 1982; Watson & Renzi, 2009). To paraphrase Granovetter (1977) the 'weakness of such strong ties'<sup>v</sup> is their tendency to be exclusive. An extreme case of exclusiveness is provided by the fragmented morality of 'amoral familism' (Banfield, 1958) with absolute loyalty to one's networks. Less extreme is the form of 'familism' (Fukuyama, 1995; 2000; Schrader, 1999). Common to these specific personal relations is that they all aim at reducing risk and uncertainty by putting the personal identity of the interaction partner and the disciplining function of moral economies into the foreground. However, such dual perceptions of the world stand against the emergence of a sphere of 'indifference' - (Giddens, 2009) which is necessary for the functioning of modern market societies: indifference separates people's functions from their personal characteristics; but this is only possible because the state provides reliable sanction mechanisms in exchange for the monopoly of violence (Elias, 1981).

Distinct spheres of morality are one crucial element in the conceptualization of trust in pre-modern, but also in modern societies with incomplete formal institutions. Under such conditions social action takes place in a context of binary and antagonistic perceptions; trust is then no longer functional as assumed by rational-choice theorists, since nobody is willing to make an advance of trust to an unknown interaction partner; but it is a very personal and emotional affair. To be disappointed in an interaction requires revenge. Trust is perceived as the opposite of distrust; friend is the opposite of foe. Social relations and our life are structured according to these binary categories, and there is no place for a third, neutral category of indifference, which is backed by the state monopoly of violence.

But let us consider how trust works on the societal level. Characteristic of modern, reflexive societies is 'system trust' (Luhmann, 2001). Trust in state institutions and the economy is based on

experience of the predictability of institutions that work according to rule of law, formal equality and secondary liability, on experts, on 'certificates', on a stable currency, on efficient and standardized sanction mechanisms, etc. Only under these conditions can 'face-to-face' relations (Giddens, 1990) be transformed into 'faceless' relations in a sphere of indifference (ibid.). These function without either party needing a personal guarantor, because both interaction partners can assume that they adhere to formal rules and laws (Christophe, 1998, p. 201), and that incorruptible state institutions negatively sanction offences. From an actor-theoretical perspective, system trust offers new scopes of action in the sphere of indifference, in which most of our interactions of everyday life occur in a functioning market economy. However, when networks are constituted by 'strong ties' only, they are closed. Missing are 'weak ties', 'bridges' to other networks (Wasserman & Faust, 1994), so that in an interplay with the insufficiently functioning formal institutions a generalized trust cannot emerge.

Closely connected to the concept of trust is that of social capital. In its functional version (Coleman, 1982; 1987; 1988) social capital constitutes an asset, which results from social relations and which has to be cultivated. Networks constitute the social capital which in addition to financial and human capital is responsible for economic and social success in society. The capital forms are to some degree convertible. Social capital can refer to individual agents and their networks, all network members and even society as a whole. If there is a lack of societal social capital, Fukuyama (1997) argues, transaction costs with unknown people are very high, so that people fall back upon their personal networks ('bounded rationality' according to Simon, & Steiner, 1993).

From this perspective, post-socialist societies may have executed the politically intended transition to a market economy by setting up formal institutions of such but have yet to make the transformation into a market society. The latter implies that people behave as in a market society, in spheres of indifference which open up many more and broader perspectives than the personalized networks. This presupposes not only the existence of the institutions of a market economy, but also the emergence of institutional trust, system trust, and societal social capital, so that people can choose between the market (faceless transactions) and networks (more personal relations) according to the criterion of transaction costs.

Let us now go back to the examples of everyday life which I provided. I do not argue with a typical primordial discourse on 'national character' and 'Russian (or soviet) mentality' that favours personal relations, but with collective experiences during Soviet and to some degree also pre-Soviet time which thickened into informal institutions. This concerned attitudes towards the state, the public and the private spheres.

In 2004 (Schrader, 2004, pp. 91-95) I discussed the political projection during Stalinist time to engender a 'Soviet man': a de-individualized, and easily governable mass man, explained as being unique and superior to people of other social times and social systems. This projection which was continuously repeated in the ideology engendered a political, sharp distinction between our (soviet) and alien (capitalist) society (Golov, & Levada, 1993, pp. 16 ff; Witte, 1997). While the ideology of homo sovieticus went into decline in the post-Stalin era, in everyday life a divide between the 'front stage' and 'back stage' (Goffman, 1969), of public and private spaces emerged, as a result of spying and an economy of scarcity. Behaviour and action in the public space were characterized by opportunism and submissiveness. People demonstrated a 'hypocritical' obedience (Fyodorov), which was reversed in the private sphere, where only among close friends and in the family did people take an anti-state stance. In economic life workers did not consider state property (e.g. tools and inventories of the factories) as a communal good but as a 'self-service' shop for personal appropriation, a behaviour people considered legitimate. As Fyodorov (1993, pp. 38-39) argues, the constraint to be double-tongued, corrupted people, and this drifting-apart and the related antagonistic moralities were the reasons for the failure of socialism (ibid., p. 41).<sup>vi</sup>

I argued at that time that due to insecurities in everyday life – and particularly due to an insufficiently functioning of the formal institutional framework – people relied on, and cultivated their private social capital, being hidden in their personalized social networks. I do not want to overstress this point here, however, my conclusion is that the ‘culture of distrust’ that had emerged during the soviet period continued also during the early transformation period and undermined the functioning of the formal institutions in a market-system-like way. The political perception of ‘Russia against the West’ seems to have been revived under President Putin.

## Small Enterprises in the Russian Federation, the Czech Republic and Bulgaria

During 2003 and 2004 my colleagues Eckhard Dittrich, Christo Stojanov and I worked on small-scale and medium entrepreneurs with three research teams in the Russian Federation, Czech Republic and Bulgaria (Dittrich et al., 2008; 2006). We collected quantitative and qualitative data. The 180 questionnaires per country provided a general data basis with regard to the foundation and growth of small enterprises and their economic environment, while the additional 30 qualitative interviews per country investigated people’s lives ("Lebensführung") in the social milieu of small entrepreneurs and investigated their role in the transformation process. These qualitative data are what I refer to in this contribution. On the whole, the number of small and medium-sized enterprises had increased dramatically during the transformation period in all Eastern and Middle-European countries, in spite of the fluctuation in that sector. Our major research question was how far they can be considered as dynamic ‘entrepreneurs’ in the Schumpeterian sense or as ‘static persons’ (Schumpeter, 1993, 172-174) that lack a combination of leadership qualities, entrepreneurial success orientation, venture readiness, economic opportunity awareness and orientation towards societal progress as found in the entrepreneur. In theory, the key characteristic of the prototypical ‘static person’ is the self-perception as a ‘labourer’, offering his labour in the form of self-employment. He is no innovator, no man of action and averse to risk in his attitude. I will try to summarize our findings with regard to adaptation to market societal entrepreneurial action.

Most Bulgarian entrepreneurs consider themselves honest small businessmen who aim at making a living with their families. Remarkable is that the respondents rarely have the self-perception of being entrepreneurs rather than professionals and ‘masters of their own destiny’. Typical is also the view that the profession "doesn't make one rich but the outcome should be sufficient to make a living"; there is no intention of growing and making higher profits. Again, and again the material shows a strong tendency to familial networks. The interviewees rely on family and friends for finance, information, or recruitment of employees and consider this reliance as a risk-minimizing orientation. At the same time, they are aware of the negative effects of such strong networks, the demands and obligations in a moral economy and narrow choice options. Also, characteristic is a very negative attitude towards bureaucracy. Mutual cross-interlocking of small entrepreneurs seems to be quite normal. This has the advantage of binding suppliers and demanders to each other and stabilizing business connections.

Most Bulgarian small and medium entrepreneurs interviewed feel themselves as being confronted by obscure and uncontrollable social and market forces, while they find certainty and trust within their small personal networks. That our respondents keep informal institutions ongoing by bribing and corrupting local bureaucrats in their everyday business is perceived as a "necessity". This bribery and also avoidance of taxation does not challenge their self-perception of honourable businessmen.

A similar self-perception to that of Bulgaria is found in the Czech Republic. In none of the interviews was the term 'profit making' used. Czech small entrepreneurs prefer talking about 'the firm', which is considered to be a means of providing a living. The decision in favour of self-employment is closely related to the wish of becoming "one's own boss", although often push factors like unemployment caused this first step. Many respondents emphasized that they aim less at 'profits' than self-realization. They distinguish a "capitalism of small people" to which they belong as opposed to "capitalism" as such. This distinction directly corresponds with clear-cut conceptions of friends (the personal network) and foes (the state, large enterprises), which strengthens the cooperation and solidarity of small enterprises. Also, in the Czech Republic entrepreneurs rarely consider themselves as corrupt, although bribery of bureaucrats is frequent.

In Russia we found the strongest self-presentation in the sense of the Schumpeterian entrepreneur or a textbook of business administration. Such a self-perception often goes along with an orientation towards expansion, which we rarely found in Bulgaria or the Czech Republic. This does not exclude participation in informal networks, which seem to be characteristic for Russian everyday life and the economy as well. Close business friends seem to replace the family with consolidation of the enterprise, the latter being more relevant in the initial phase of setting up an enterprise. Characteristic for Russian small entrepreneurs seems to be: "With normal people one tries to find a reasonable agreement". This also serves as the legitimization for informal payments to the bureaucracy or for protection. "Money" seems to be the key to problem solutions. Interestingly, Russian respondents openly talked about corruption and practices in the shadow economy. Their relation to the bureaucracy can be characterized as ambivalent insofar as their own networks may incorporate some bureaucrats, although the bureaucracy is usually considered as belonging to the 'hostile environment'.

## Summary of the findings on small and medium entrepreneurs

On the whole, our research on entrepreneurs allowed us to make some cautious statements with regard to the morphology of the post-socialist order. We argued that the considered small entrepreneurs have a communitarized life, being characterized by informal networks which provide a security function. For small enterprises market entry and consolidation of the enterprise are no pure economic matter, because small entrepreneurs are enmeshed in their life world. They don't apply for credit from banks or state promotion programmes but raise the capital from family members, relatives and friends. In our empirical material there is no clear-cut distinction between private, business and public spheres; all of them are intermingled by incorporating business friends and local bureaucrats into one's personal networks. The major business intention is the survival of the owner's family. 'Bureaucracy' as an abstract entity is considered as belonging to the hostile environment, but the interlocking with 'helpful' bureaucrats from the city administration, the fire department, the hygiene department, and so on, makes business work.

These networks had and have a security function vis-à-vis the state in socialism, state bureaucracy and the market in post-socialism. Under socialism they worked both functionally as well as dysfunctionally for the system, because they kept the economy of scarcity running but, at the same time, gradually undermined the legitimacy of the state and the system. These informal networks were a communications system to cope with the scarcity of goods by means of reciprocal relations and barter. The double morality between 'us' and 'them' has already been addressed in the first part of this contribution. While some authors hold that the 'transgression of deficits' resulted in a starvation of such networks (e.g. Chavdarova, 1996; Suchodojeva, 1996), our research findings show that these networks and the dual perception of "us" in a hostile environment ("them") was also characteristic for small and medium entrepreneurs during the 2000s, whereas the functions of these networks have slightly changed. They provide stability and security, and their great

importance correlates to averse-to-risk behaviour at the expense of market opportunities. At the same time such informal institutions seem to undermine the use of formal institutions such as banks, insurance companies, chambers of commerce and chambers of crafts or business consultancies. Bureaucracies provide 'facades' behind which administrators pursue their personal interest in an exchange relation with the business world.

The investigated small entrepreneurs show a subjective sense of solidarity, which astonishingly includes both their competitors at the same economic level as well as low-ranking bureaucrats. Cohesion occurs from an opposing position towards radical individualism in a market society and the 'inhumanity' of large enterprises and the world market. Our initial hypothesis in this project aimed at the idea of an evolution from a small to medium and large enterprise (Schumpeter, 1993, pp. 98, 145) but we hardly found support for that hypotheses in our interviews.

## A Household Survey in Central Asia

The last project to be considered here is our research into private households in Kazakhstan and Kyrgyzstan during 2011-2014 (Dittrich & Schrader, 2015; 2016). The major focus of this research was how after almost 30 years of post-socialism middle-class households have adapted themselves to market conditions in their actions and planning and how they achieve sustainable livelihoods. The research was conducted with three research teams from North Kazakhstan, South Kazakhstan and Kyrgyzstan and consists of a quantitative, non-representative household survey based on 450 questionnaires (first stage), and of 120 qualitative interviews (second stage). The interviews were done both in urban and rural regions: in the major economic centres of the two countries, i.e. Astana, Almaty and Bishkek, and their rural environments. The teams were given research training by the applicants.

We investigated

- the process of transformation of households at the micro-level and its relatedness to macro-level transformation;
- the adjustment of households to economic insecurity and the risk of market systems;
- the differences between the households in Kazakhstan and Kyrgyzstan, representing two countries with very different economic conditions and transformation paths,<sup>vii</sup> between rural and urban households, and between age cohorts;
- the assets of the households (forms of capital according to the sustainable livelihoods approach SLA)<sup>viii</sup> by which they can make their living and develop strategies of coping with insecurities.

We worked with the household-level approach (Hess et al., 2000). Asking the households to name the person who knows best about the issue discussed, the respondents usually named women who keep the household emotionally together, who have important functions in budget management, and who keep strong links to family members who have left the household (migration, marriage, education, etc.).

What can we say about continuity and change, of path dependency and adaptation to the market system? First of all, we observed changes in women's roles (Dittrich & Schrader, 2018). While traditionally the head of the household is usually the eldest male, this is maintained on the 'front stage' (Goffman) i.e. in public. But, 'backstage', i.e. within the household, both, men and women, often even the entire family, decides about household issues and investments. Sometimes the woman is the major breadwinner and not her husband, which contradicts the traditional head of household perception. Also worth mentioning is that a considerable number of respondents were divorced although the ideal life perception is the family. Discussions concerning alimonies are a conflictual topic in these cases, because the males do not fulfil their legal obligations. We also found

single-parent households in our sample, all headed by women. Single young women migrate to the city for the purpose of work or education. In urban settings we can also observe a tendency towards the nuclear family, which is perhaps less a result of modernization rather than of building policy (two- or three-room apartments). With regard to gender roles, the soviet model of families was not based on the male breadwinner model as in Western societies, especially after the Second World War. But even though women were more equal in obtaining education and in working life than in Western European societies, women were not therefore necessarily more emancipated in private life with regard to household tasks and decision-making. With nowadays a strong visibility of women in jobs we believe that this is to some degree path-dependent from Soviet times (Allan, & Crow, 2001, 15). An Islamistic 'counter-revolution' against women's visibility in public life is taking place in Tajikistan but not yet in Kazakhstan nor North Kyrgyzstan.

In the rural setting traditional gender roles are more common insofar that the work in the house is related to women - wives and their daughters, sometimes also grandmothers - while the chores around the house and heavier work in subsistence production are related to male household members. But also, in these settings most women are income earners. Also here we can see path dependency from the Soviet past where wages in the "industrialized villages" (Oswald et al., 2005; Dittrich, & Oswald, 2010) provided the major incomes stemming both from men's as well as women's work in the kolkhoz. However, this structure of the industrialized village has collapsed. Only a limited number of public jobs in administration, education and health, usually held by women, and some private jobs in commerce and production have remained, while the majority of rural dwellers have a combined income from various labour opportunities in the formal and informal sectors as well as in subsistence production.

Both countries have also experienced economic crises. But while one may describe Kazakhstan as having gone through a continuous development with some depressions in the world market, the economic and also the general situation of Kyrgyzstan appears as an ongoing crisis. Today Kazakhstan can be described as a rather successful, middle-income country with strong traits of a resource-based state (Howie, 2014, p. 71ff.) and a mild authoritarian rule aiming at top-down developments like, for instance, Singapore (Nazarbaev, 2008, p. 23ff.). While in the early 1990s observers heralded Kyrgyzstan as the forerunner of a liberal, market-oriented economy and society in Central Asia, economic development is very weak. Kyrgyzstan belongs to the poorest countries in Central Asia and even on the world scale, that has run through a series of "revolutions", all resulting in state capture of new groups and a constant situation of political and economic instability. State authority is weak. Economic output is very weak causing a high amount of migration from the country and remittances home being the base of survival for many households.<sup>ix</sup>

Our data show that middle-class households are well aware of the advantages and risks of market conditions. They know about the necessity to make their own living and to rely on their own. Many of them combine incomes from the formal, the informal and the subsistence sectors (Elwert et al., 1983). Many accept changing their location for job opportunities. But while Kazakhstani households overwhelmingly migrate from rural to urban centres, Kyrgyzstani households quite often have migrant members, notably in Russia and Kazakhstan. It is a fact that the Kyrgyzstani economy does not offer many job options. International migrants abroad experience all the typical characteristics of diaspora communities, stigmatization and social exclusion in the host countries. The migration of Kazakhstanis from rural regions to cities is often connected with education. In the booming cities of Astana, Almaty and some more secondary cities rural migrants find employment opportunities. The other way around, some pensioners return to their villages later on, because life is cheaper and healthier.

The analyses also show that most citizens in both countries have experienced periods of unemployment. They use diversification of household income sources to lower the risks and options of subsistence production and of self-provisioning to render their households more stable.

Intergenerational relations and kinship networks are based on mutual help norms of reciprocity and provide a risk insurance. In urban areas and among better-off households, these networks seem to be more open socially including friends, neighbours and colleagues. However, when wealth increases, household members begin reflecting about advantages and disadvantages concerning personal networks, so that reciprocity norms weaken. Here the preservation of reciprocity networks becomes an option, while among the lower middle class they are a necessity. Thus, among better-off households many kinship networks transform into purely social networks and lose their traditional economic emergency character, while functional networks of business friends emerge parallel to them.

Within households which usually consist of two or three generations, incomes of the household members or at least part of them are normally pooled even if children have grown up and have their own salaries. Also, pensions go into the pool. Purchases and investments are taken from that pool. In cities this pool is sometimes confined to buying necessities of everyday life, while every contributing household member keeps a certain individual part as "pocket money". Family members living outside the household often get support in cash or in kind. This holds true for children who are studying, but also for pensioners. In general, family represents a social capital that can be activated if necessary; support is obligatory, be it monetary, in kind or by labour contributions.

Family relations are preserved even if the families are no longer located in one particular place as a result of migration, housing, etc. At various family feasts family members congregate, even when this involves an expensive flight. Traditionally oriented ethnic Kazakhs as well as Kyrgyz claim that this is their way of living, which is different from individualized Western societies. They hold that even modernization in the cities has no eroding effect on the larger family and kinship network. Putting this issue into the context of modernization theory this would indeed be a different modernization path. However, twenty-five years of rapid modernization after independence is of course a period which is too short to draw such far-reaching conclusions, although also the communist experiment, which had enormous consequences for family and kinship, was not able to break the family tradition.

How far are savings, credit-taking and insurance provisions of private households in our sample related to the new market organizations? In general, credit options are from formal financial organizations or from kin, sometimes friends. Among better-off households we find some who use formal credit for investment, for higher consumer purchases or for school fees. The majority of respondents use their kinship networks for taking – mainly interest-free and run-time independent – credits, many of them reporting negative personal experience with banks or such among their relatives or friends. In rural regions households take micro credits from micro credit organizations or from their networks.

High amounts of saving on a savings account or in financial instruments such as stocks could not be observed in our sample. This can be due to transformation happening only three decades ago and within that rather short period middle-class households invested in real estate (for own use or even for rent returns) and higher consumer goods rather than in financial products. Besides, however, much saving is done at home. Not that banks do not offer such accounts for middle-class households, but the majority in the sample, both urban and rural, simply do not trust private banks.

In both countries poorer households quite often declare their inability to save in cash. For them subsistence production or the help in kind by members of the family network are of the utmost importance to reduce living costs and to survive. For many rural households cattle represent savings, investments and insurance against risks at one and the same time. Bridging short-term cash squeezes by credits can be found among certain rural households and certain urban jobholders because of the seasonality of their incomes.

The organized insurance business for life, old age, health etc. is negligible from the perspective of private households – apart from the obligatory forms that exist, although we find international insurance companies in the cities. It is obvious that the state security systems do not or insufficiently supply the citizens with housing, health care, pensions, and free (higher) education.

For a view on the endowment with capitals, rural-urban differences are very important. On the one hand, rural households are more vulnerable concerning cash, with food scarcity playing only a small role while in the urban contexts, food is a crucial issue due to high (and rising) prices. Of course, this difference is closely related to subsistence production as an access to natural capital which we find far more frequently in rural areas than in urban ones. Compared to urban households, rural ones complain more often about low paid, inadequate jobs and their scarcity thus causing them to organize survival with the help of different forms of self-provisioning. Some rural households also complain about the endowment with physical capital, especially bad transport and schooling facilities. The job situation, the need of subsistence production, as well as bad physical capital and human capital options contribute to the push factors concerning migration.

Social capital is not only a valuable means to enhance household options for economic wellbeing through mutual help. It also touches 'blat' relations, the inclusion of influential people in one's networks, and the nourishment of these relations by presents and the like. Blat and all other forms of bribery are frequent for the purpose of gaining jobs, having access to subsidies for housing, finding kindergarten places, paying for the access to and good results in the educational system, getting justice, being fairly treated by the police and by public officials and civil servants, getting medical treatment immediately, etc. That is, all the spheres in their life are touched, and respondents openly report on it. Despite the complaints of the interviewees about corruption in general, most give and take bribes in everyday life. Some see this as a pure necessity without which certain services or positions are not available. For them it is part of the struggle for survival on all levels of society. Others differentiate, naming as corruption only the immoral behaviour of the rich and the persons of influence in society. Others explain it as a national characteristic of gratitude and mutual gift exchange. However, it undermines the emergence of a meritocratic system.

Households develop enduring practices in order to create sustainability. They save, if possible, for coping with events like births, marriages, anniversaries, funerals etc., but also shocks that stem, for instance, from criminal actions, bad harvests etc., and they thus react to the risks of capitalism as perceived by them. These strategies are deeply intertwined with the assets, the forms of capital, the households can build upon and their convertibility. We followed de Haan & Zoomers (2005) by distinguishing four strategies: (a) at the bottom end - security, a sustainable strategy especially for those households that live near the subsistence minimum, characterized by risk avoidance and living from hand to mouth, a muddling through everyday life, and dependence on security networks, subsistence production and mostly irregular cash incomes; (b) above that - compensation, a condition where negative developments or shocks can be compensated through, for instance, the use of social capital or the sale of economic values; (c) at the next level - we find consolidation, where the household has the security of existing resources and efforts by purposeful investments and planning (e.g., in house building, purchase of a car, buying larger quantities, buying hay in summer, etc.); and at the top (d) accumulation, a long-term strategy to create a resource basis in order to enable future actions of the households being more 'profitable' than the present one (e.g. by deposits, investment in children's education etc.).

As can be expected, accumulation strategies are found among the better-off households while poorer middle-class households largely fit into the security strategies to achieve sustainability. They live in more precarious constellations; their vulnerability is high. Therefore, many such households cannot gamble on chances nor losses; they show risk-averse behaviour and therefore do not sustainably change their living conditions. Moreover, all middle-class households have a high appreciation of education to render households more secure by transferring better life chances to

the next generation. Therefore, also many poorer households try to pursue such goals. Most struggle hard, and many do not succeed. Poorer households dispose of few assets with low convertibility, and often we find relatives in similar life circumstances in their networks so that it is difficult to help each other. All in all, it is clear that the strategies of this class of households mainly result in keeping their present position, upward mobility being rather improbable.

Better off households are not only able to compensate for losses, shocks and vulnerabilities in general but are also able to consolidate their households and thus to live completely different lives to those of the poorer households. This includes, for instance, long-term planning which may reduce living expenses if you are able to buy anti-cyclically. They may invest in real estate and human capital. The financial capital of these households also allows for regular vacations. The networks of these better off households support their accumulation strategies. They may include colleagues, people from the administration and from politics and professionals who can give advice. Some of these households report considerable savings and investments that document their financial power. They display a lifestyle near to affluence: big SUVs, housing in well-protected fashionable regions, accentuation of a healthy diet and a healthy lifestyle, or use of service providers. Some donate and thus take a public role. The accumulation strategy often combines positions in the state sector with activities in the private one. On average, all members of the household have good positions with good monetary incomes. These households have fully accommodated to the risks of capitalist market societies and specifics in their countries.

## Conclusion

The intention of this paper was to go through my observations and research in post-Soviet societies during the period of the mid-1990s until now. The core question underlying all the research was to what extent the system change from a socialist system of planned economy to a capitalist system has been successful or whether it is still ongoing, showing formal and informal institutions that do not match each other, so that informal institutions may undermine formal ones. If the latter is true, the next question is whether this is only a not-yet completed process of intergenerational change, or whether we can assume, in a variation of the VOC approach, that a specific post-socialist capitalism has emerged, having certain distinct elements not found in the other variations. I should like to probe a little deeper into this discussion.

With regard to the transformational approach, I would like to emphasize that we do not consider organizational innovation as an "Ersatz" (replacement) in the sense of transition; what we can observe are configurations and rearrangements of existing institutional elements side by side with market-like structures. Once we apply such a view, it is possible to assume that in post-socialist societies specific economic and societal orderings are at work that have a linkage to the Soviet past, perhaps to be grouped as a specific type of capitalism (Nölke, & Vliegenthart 2009; Myant, 2012). We can assume that during the early transition a new "Landnahme" (Dörre et al. 2009) occurred, in which property rights and the power over things were appropriated. In this redistribution process personal and political connections (specific forms of social capital, being related to the former power elite) were key constituents. This explains an identification with 'political capitalism' during the early transformation period, which hints at a strong interminglement of the economic and the political spheres. The problem of property rights, however, is always that – once property rights have been acquired – nobody later on asks, how, but as a matter of fact this stabilizes power relations. From my perspective this is an argument for a continuation of political capitalism in certain socio-economic spheres.

Beyer admits that in post-socialist countries the differences to the liberal and the coordinated types (Hall, & Soskice, 2001) of capitalism are indeed large, but, on the other hand, he emphasizes that we can so far not speak about a pure type of post-socialist capitalism. Nevertheless, we should treat

this discussion of a new variety seriously (Beyer, 2009, p. 94 f.) and make it ongoing. Myant & Drahekoupil (in Menz, 2011) meanwhile distinguish five such variations, three of them - "oligarchic or clientelistic capitalism", "order states", and "remittance and aid-based economies" having democratic deficits. In political science we also discuss "defective democracies" (Christophe, 1998; Merkel, 2003). Characteristic of them is a high degree of corruption (Merkel et al., 2003, p. 91).

Taking the distinctions of Myant & Drahekoupil, which are ideal types, for our investigated societies, I would label Russia and Kazakhstan a mix of "oligarchic or clientelistic capitalism" and "order states", both constituting 'façade democracies' or 'guided democracies' (Mommensen, & Nußberger, 2007), while as a very poor state Kyrgyzstan would more relate to the type of "remittance and aid-based economies".

I mentioned earlier that our research in post-soviet countries covers a period from the mid-1990s to mid-2010s. While the three research projects refer to periods of two to three years, I took participant observation, particularly in Russia and Central Asia, for a much longer period. Both the research and my observations have shown particular characteristics which seem to be different to the Western Continental European and Anglo-Saxon types. I would like to summarize them as follows.

(1) First of all, most worlds of everyday life which we investigated show a clear-cut double morality. Both the state bureaucracy and the rich capitalists (and the coalition of these two) are considered to be foes, against whom the small people have to protect themselves. This happens by avoiding taxation, invisibility in the small-enterprise lifeworld or even as a citizen. Furthermore, security is provided by one's personal face-to-face networks and risk aversion towards 'pure' market transactions.

(2) But whenever it is necessary to cope with bureaucracy, it is advantageous to know somebody in the lower bureaucracy ('blat' or other forms of bribery). This is often necessary when bureaucrats do not act to serve the citizens but for their own personal benefits, misusing their power and giving signals that some money would speed up the bureaucratic process. In the field of small enterprises typical institutions that have to be bribed are the fire and hygiene departments, other technical services, customs officials and airlines, the registration office, and so on, not to mention the police in traffic and transportation issues; from the perspective of normal people almost the entire lifeworld is corrupt and requires bribery to achieve what is intended. 'Blat' relations can be interpreted as a form of nourishing one's social capital. One keeps good relations with influential people even then when one does not aim at support at that moment but as an investment, so that one can instrumentalize these relations whenever it is necessary.

(3) The double morality is directly connected to the strong reliance on personal face-to-face networks, and avoidance of formal institutions, by self-organization of loans and familial "insurance" mechanisms of reciprocity, by employment of people whom one knows (shared biographies), and the like. In all our research we observed such strong network ties, whereas our household research, however, shows a gradual change in the composition and use of such, because the better the income situation, the less dependence there is in such households on informal networks as "insurance mechanisms". This means that personal networks become options side-by-side with formal institutions such as banks or insurance companies. Also, unconditional reciprocity in family relations (moral economy) is scrutinized by judging whether the respective family member "deserves" support. It may be rejected, for example, if the potential supporter judges the person concerned to be unfit for life. Due to their financial buffers such agents can take risks, make higher gains or losses and act more like market agents.

Coming back to the question of a specific variation of post-socialist capitalism, there are indeed a number of indicators on the level of everyday life and the people's economy that support such thinking. At the same time, however, some indicators show that with intergenerational change

(Inglehart, 2003) and with rising incomes values and attitudes may change. The latter would hint at dependency between income level of society and market action. So indeed, many of our investigations support the transition approach of informal institutional continuity even after 25 years of post-socialism, while others clearly show change. It is therefore perhaps still too early to make a final statement about a specific variation of post-socialist capitalism.

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## Endnotes

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- i This article is a modified version of a working paper (2019) by the author (working paper no. 77, Institute II: Sociology, Otto-von-Guericke University of Magdeburg, Germany).
- ii According to Giddens (1979) structuration expresses the mutual dependency of human agency and social structures. Giddens argues that social structures are intimately involved in the production of action. The structural properties of social systems provide the means by which people act and they are also the outcome of such actions
- iii Scholars argued that this hybrid capitalism still functioned according to the logic of socialist systems: It is a logic of reproduction of power and dependency fundamentally different from the logic of accumulation of capital, but adapted to function under capitalist conditions.
- iv This was rational. I lost a lot of money in the financial crisis of 2008 when the private bank where I had my account collapsed. I had simply taken my 'collective memory' from Germany that since the end of World War II there was no larger bank crisis any more so that one can trust banks.
- v Mark Granovetter (1992) investigated strong and weak ties from the perspective of network theory. The 'strength of weak ties' is their ability to open up closed networks by building bridges to other networks. Recent approaches applying Granovetter's distinction to the notion of social capital distinguish 'bonding capital' (between people) and 'bridging capital' (between groups).
- vi Contrary to this view Voronkov & Zdravomyslova distinguish three spheres (Zdravomyslova & Voronkov, 2002; Voronkov & Zdravomyslova, 2004); due to the fact that the public sphere was again split into formal and informal, in addition to the private sphere.
- vii Kazakhstan is rich in resources (predominantly oil, gas, uranium) but with limited secondary-sector development and sparsely populated. As a result of economic growth in recent years, a middle class has emerged, notably in the urban centers. Kyrgyzstan is a mountainous, mainly agro-pastoralist country with only little primary resources except water and some gold. Industrialization during Soviet times was and is still very limited. The country belonged to the poorest regions of the former SU. Today, it is politically rather unstable. Several more or less peaceful "revolutions" occurred. Political unrest followed by ethnic disputes in 2010 caused a sharp drop in economic wellbeing and the GNI fell, contrary to the situation in Kazakhstan and the other Central Asian countries, where it has displayed a continuous rise since 2007, if we follow World Bank data. There is a lot of labour migration directed towards the big neighbour as well as to Russia and to other countries.
- viii See e.g. Asian Development Bank (2008). The SLA refers to physical capital, financial capital, human capital, social capital and natural capital and their mutual convertibility.
- ix While Kazakhstani citizens overwhelmingly vote the breakdown of the Soviet Union as beneficial (45% against 25% as harmful), Kyrgyzstani citizens vote the breakdown overwhelmingly as harmful (61% against 16% as beneficial) (Gallup, acc. 10.04. 2014, 21.34).

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*Reinhard Golz, Olga Graumann, & David Whybra (Germany)*

## The Humanization of Education: Some Major Contemporary Challenges for an Innovative Concept

**Abstract:** *The humanities and social sciences, and in particular the educational sciences, are facing major challenges in view of the current socio-political, economic and foreign policy upheavals. The authors characterize some of these challenges to education theorists and practical pedagogues against the background of the ideas of a "Humanization of Education" that emerged in Russia after the collapse of the Soviet Union and led to the founding of the "International Academy for the Humanization of Education" (IAHE) in 1995. That humanization approach is still very relevant today. Here, the focus is on the current discussions of national identity, individuality and social responsibility, problems and tasks of inclusion and integration, as well as on the effects of digitalization on personality development. The influence of "Progressive Education" in the first half of the 20th century on the discussions centering on the "Humanization of Education" is taken into account, and the authors pose the question of the sustainability of such innovations in times of social upheavals.*

**Keywords:** *Humanization of Education, Progressive Education, national identity, nationalism, individuality, inclusion, integration, digitalization*

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**摘要** (Olga Graumann, Reinhard Golz, & David Whybra: 育的人性化：在社会动荡时期的一项创新概念): 鉴于当前的社会政治, 社会, 经济及外交政策的动荡变化, 人文社会科学, 尤其是教育科学正面临重大挑战。对于教育理论家和实践教育者来说, 其中的一些挑战, 作者们是基于在苏联解体后, 在俄罗斯兴起的“教育的人性化”的思想背景下, 而导致的于 1995 年成立了“教育人性化国际学院”, 并至今仍显得至关重要。重点是关于民族身份, 个性, 社会责任, 包容及融合的问题与任务, 以及数字化对于个人发展影响的当前讨论。二十世纪上半叶的进阶教育对关于“教育的人性化”讨论的影响有所涉及, 并且作者们发问关于这一创新在社会动荡时期的可持续性。

**关键词:** 教育的人性化, 进阶教育, 民族身份, 民族主义, 个性, 包容, 融合, 数字化

**摘要** (Reinhard Golz, Olga Graumann, & David Whybra: 教育的人性化：在社會動盪時期的一項創新概念): 鑑於當前的社會政治, 社會, 經濟及外交政策的動盪變化, 人文社會科學, 尤其是教育科學正面臨重大挑戰。對於教育理論家和實踐教育者來說, 其中的一些挑戰, 作者們是基於在蘇聯解體後, 在俄羅斯興起的“教育的人性化”的思想背景下, 而導致的於 1995 年成立了“教育人性化國際學院”, 並至今仍顯得至關重要。重點是關於民族身份, 個性, 社會責任, 包容及融合的問題與任務, 以及數字化對於個人發展影響的當前討論。二十世紀上半葉的進階教育對關於“教育的人性化”討論的影響有所涉及, 並且作者們發問關於這一創新在社會動盪時期的可持續性。

**關鍵詞:** 教育的人性化, 進階教育, 民族身份, 民族主義, 個性, 包容, 融合, 數字化

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**Zusammenfassung** (Reinhard Golz, Olga Graumann, & David Whybra: Humanisierung der Bildung: Ein innovatives Konzept in Zeiten gesellschaftlicher Umbrüche): Die Geistes- und Sozialwissenschaften und insbesondere die Erziehungswissenschaften stehen angesichts der aktuellen gesellschaftspolitischen, sozialen, wirtschaftlichen und außenpolitischen Umbrüche vor großen Herausforderungen. Einige dieser Herausforderungen für Bildungstheoretiker und praktische Pädagogen charakterisieren die Autoren vor dem Hintergrund der Ideen einer "Humanisierung der Bildung", die in Russland nach dem Zusammenbruch der Sowjetunion entstanden sind, 1995 zur Gründung der "International Academy for the Humanization of Education" führten und bis heute relevant erscheinen. Im Mittelpunkt stehen die

*aktuellen Diskussionen über nationale Identität, Individualität und soziale Verantwortung, Probleme und Aufgaben der Inklusion und Integration sowie über die Auswirkungen der Digitalisierung auf die Persönlichkeitsentwicklung. Berücksichtigt wird der Einfluss der Reformpädagogik (Progressive Education) der ersten Hälfte des 20. Jahrhunderts auf die Diskussionen über "Humanisierung der Bildung", und die Autoren stellen die Frage nach der Nachhaltigkeit solcher Innovationen in Zeiten gesellschaftlicher Umbrüche.*

**Schlüsselwörter:** *Humanisierung der Bildung, Reformpädagogik (Progressive Education), nationale Identität, Nationalismus, Individualität, Inklusion, Integration, Digitalisierung*

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**Аннотация** (Райнхард Гольц, Ольга Грауманн, Давид Вайбра: Гуманизация образования: инновативная концепция в эпоху общественных трансформаций): Гуманитарные и социальные науки, особенно педагогика, на фоне происходящих общественно-политических, социальных, экономических и внешнеполитических трансформаций оказываются перед серьезными вызовами. Некоторые вызовы, с которыми сталкиваются теоретики образования и педагоги-практики, авторы статьи характеризуют через идеи гуманизации образования, которые зародились в России после распада СССР; эти идеи легли в основу созданной в 1995 году «Международной академии гуманизации образования» и не потеряли своей актуальности и на сегодняшний день. В фокусе внимания – научные дискуссии на темы национальной идентичности, индивидуальности и социальной ответственности, проблемы и задачи инклюзивного образования и интеграции, а также влияние дигитализации на развитие личности. Рассматривается влияние реформаторской педагогики (прогрессивная педагогика) первой половины двадцатого века на взгляды по гуманизации образования; авторы ставят вопрос об устойчивости таких инноваций в период социальных трансформаций.

**Ключевые слова:** *гуманизация образования, прогрессивная педагогика (реформаторская педагогика), национальная идентичность, индивидуализация, инклюзия, интеграция, дигитализация*

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## The Idea of the Humanization of Education in the Post-Soviet Era

The following quote was part of a statement by about 100 participants of the founding conference of the "International Academy for the Humanization of Education" (IAHE: here forthwith "the Academy") in the Russian Siberian city of Biysk in 1995, three years after the end of the Soviet Union:

The human sciences must put human values in the foreground in order to keep the ideal of a democratic society viable, because this depends to a great extent on the formation of the personality, the development of its self-determination. (...) 'Humanism' means an orientation towards individual freedom and social responsibility. (Resolutions, 1995, p. 2 f.; see also: Berulava, 1995, p. 20 ff.; Golz, 2012).

In Russia at that time, contradictory developments and socio-critical discussions intensified and in the field of educational science and pedagogical practice the idea of humanizing education increasingly became the subject of discussion. The Academy mentioned above was founded on the initiative of the Russian educationalist Mikhail N. Berulava. The participants of the founding conference came from Russia, some successor states of the former Soviet Union, from Eastern Europe, but also from Canada (Prof. Kas Mazurek, University of Lethbridge), and Germany (among them the co-author R. Golz). There was a growing international interest in educational developments in Eastern Europe and Russia, the region with the most serious social changes of the time. The focus was on the question of what happens to pedagogy in times of social upheaval and how its relationship to traditions and innovations is shaped in the national and international context.

## The Resurgence of Progressive Education

Some of the "innovative" ideas were a partly unconscious "renaissance" of national and international education-political innovations from the time of the development of so-called Progressive Education around the turn of the 19th to the 20th century. There were many similarities, e.g. the revived demands for a "child-oriented" as opposed to "teacher-centered" education, the relationship between individuality and social responsibility, productive activity and personality development, "learning by doing", "cooperative learning", the "project method" etc., to name but a few aspects.

Leading Western progressive pedagogical concepts put forward, for example, by the Americans William H. Kilpatrick and John Dewey, the work school of the German Georg Kerschensteiner, the alternative pedagogical concepts of the Italian Maria Montessori, the French Celestin Freinet and many others, had already to a certain extent been discussed in the Soviet Union. The early Soviet progressive pedagogues such as Stanislav T. Schazkiy, Anton S. Makarenko and Pavel P. Blonskiy should also be mentioned, and it is known that John Dewey had visited the Soviet Union as early as 1928 to advise on the introduction of the "project method" (Egorova, 2016, p. 73).

After the end of the Soviet Union, several progressive Russian pedagogues followed this up when it came to combining progressive and alternative pedagogical approaches with current educational needs. In this context also the innovative, so-called "schools of authors" (авторские школы) founded in the 1990s were and are typical of this.

In an interview, Alexander N. Tubelskij, the then director (and author) of the "School of Self-Determination" (Школа Самоопределения) (Tubelskiy, 1994) in Moscow and President of the "Association of Innovative Schools" in Russia, answered the question of the interviewer (R. Golz) about his school's basic concern amongst other things as follows:

We know the work of Dewey (...), we use the concepts of the French Freinet, the Italian Montessori. (...) We use everything Progressive Education can give us. (...) As far as Russian educators are concerned, Lev N. Tolstoy is very important to me. (...) Among the foreign educators it is also the Polish progressive pedagogue Janusz Korczak.

*(From a video of a conversation in Russian between A.N. Tubelskij and R. Golz from September 1995 - archived by R.G.)*

Alexander Tubelskiy died in 2007, but his school and his idea live on.

In view of these and other examples of the recourse to international progressive education, it is not surprising that the topics dealt with in the Academy and its projects were often "open doors" for most Russian and other educators from former socialist countries.

## Expanding Concepts of Progressivism

However, there were still controversial discussions on how to define the "humanization of education" as precisely as possible without neglecting the individual aspects already mentioned. As a result of several conferences organised by the Academy in Russia, Germany and other European countries, the German educationalist Rudolf W. Keck, the then president of the Academy at the turn of the millenium, developed the "Ten Principles of the Humanization of Education" as a framework for the reform dialogue, the essential hallmarks of which are reproduced here in concise terms of content and language:

In education there should be as much autonomy and freedom as possible, as much educational guidance and state control as a minimum will allow. (...) A pre-requirement for the pedagogical modernisation of school will therefore be a change in its legal, administrative

and professional conditions. (...) The revival and restructuring of the humanisation of education can be seen as a renaissance of Progressive Education as part of the transformation process from modern to post-modern society. (...) The fostering of the individual in correspondence with social responsibility in the framework of a reflexive pedagogy which empowers the individual to self-organisation. (...) Preferences for open instruction and the institutional, curricular and methodological consequences thereof; creative education; learning by doing; teaching and learning as an opportunity to find meaning (instruction as communication) in combination with moral issues in school; cooperation between home and school and a variety of schools (...) (see in detail: Keck, 1999).

Subsequently, there was no longer a question of one-sided giving from the Western side, which was sometimes perceived as an arrogant tutorial (smart alecks) as was (see, for example, the statement of the Russian educationalist Nikolay D. Nikandrov, mentioned below) and partly still is the case in the context of the German-German dialogue even after 30 years of reunification.

In the meantime, there are contradictory new social challenges due to a threat of coexisting, even cooperating international nationalist party movements, and the irrational protectionist, foreign policy and economic developments in several countries. As a result, new terminological questions and tasks also arise for the "Humanisation of Education".

## National Identity vs. Individuality

The role of personal identity in times of social transformation has been examined using the example of the difficult and in part still ongoing process of the internal reunification of East and West Germany after 1989 (Born, 2004). In the following, we should like to deal in more detail with aspects of national and cultural identity in the context of the social upheavals of the present. Not only in Russia and some Eastern European countries (especially in Poland, Slovakia and Hungary), but throughout Europe, has the concept of identity, i.e. the formation or maintenance of a "civic identity" of children and young people within the framework of teaching and extracurricular activities, now been added and emphasized. In Russia, too, some educationalists call for a systemic, integrated and creative implementation of teaching and learning in the formation of civic identity in addition to individualization (Egorova, 2017). Meant is actually: national identity; and in other publications more and more often also with a nationalistic touch.

At a critical distance from this, other authors have determined on the basis of an analysis of Russian and American history textbooks that not only in Russia there are such tendencies to an (over-)emphasis on national interests:

Students in high school history classes (...) are subjected to curricula, texts, images, and symbols that promote patriotic and nationalist ideology (...) including the heroification of certain political and military figures (Tsyrlina-Spady, & Lovorn, 2015).

There is nothing to say against a "healthy" patriotic consciousness or national identity as long as it does not degenerate into nationalism which raises the question of whether and to what extent the original aspects of the Humanization of Education are sacrificed to certain political and economic usefulness considerations. The position of one of the leading Russian educationalists, N.D. Nikandrov, published in 2000, finds relevance among moderate advocates of a pronounced national orientation to this day:

The unchecked gushing in praise of everything which has come from other countries (...) does not educate our young people to be patriots. But at the moment patriotism seems to be gradually re-assuming its proper place (Nikandrov, 2000a, p. 41). (Elsewhere he writes:) The

aim of socialization and education now and in future (... is) the Russian patriot who sets his priorities according to Russian national values – while respecting the values of other cultures (Nikandrov, 2000b, p. 266).

It is undisputed that experiences and positions from other countries should not be uncritically imported. Konstantin D. Ushinskiy (1823-1840), a classic figure of Russian pedagogy, had already stressed that each people has its own educational goals and methods, which result from its own national identity and individuality. Russia needed neither the diseases of other educational systems nor their medicine (Ushinskiy, 1960, p. 60; Kegler, 1991, p. 72).

However, today, it should be general knowledge and experience that "educational transformations without consideration of international experiences seldom last" (Golz, 2004, p. 7). And there are justified hopes for long-term scientific cooperation between Russian and Western educationalists who represent and put into practice the basic ideas of humanizing education in a contemporary way. Some Russian authors regard e.g. the activities of the Academy mentioned above as a resource for non-state-directed international continuing education, and as an international and intercultural space for the exchange of innovations in the fields of social sciences and education, and for securing the corresponding synergy effects (Pevsner, & Petryakov, 2015)

For some newer Russian pedagogical online dictionaries, too, the general human values and the social and intercultural competences of the individual are of central importance for the preservation and development of a democratic and humanistic society (see the entries for the tag "Гуманизация образования" [Humanization of education] in:

[https://pedagogical\\_dictionary.academic.ru/861](https://pedagogical_dictionary.academic.ru/861)).

It turns out that the humanist mission is emphasized despite (or because of) social and political uncertainties and upheavals, and as a result of increasing complications in international relations. In some countries intercultural and interreligious conflicts, xenophobic, racist, islamophobic, anti-semitic and nationalist tendencies are on the rise. Most disturbing are irrational protectionist, foreign political and economic threats of the present day.

All this makes the realization of the Humanization of Education more difficult, if one thinks, for example, of the balanced humanistic development of individuality and social responsibility. In the period following the collapse of the Soviet Union there was an overemphasis on individuality as opposed to sociality (collectivity), which was also to be understood as a turning away from Anton S. Makarenko's supposedly exaggerated collectivist educational concept. At present, these two pedagogical demands are mentioned in a certain context, but under a new dictum of "national identity" there are also tendencies towards a new imbalance - in favour of a (national) adoption of the individual. Here and in the following the multi-functional tasks and challenges of humanizing education become apparent.

## Inclusive and integrative education

### *Inclusive education*

In the context of humanization, the issue of inclusion plays a special role. The „International Academy for the Humanization of Education“ (headed by the former President, Olga Graumann from 2009 - 2016) together with colleagues from Russia, the Ukraine and the Baltic countries, has initiated and implemented various cooperation projects, e.g. inclusive educational curricula for Bachelor's, Master's, doctoral and continuing education degree courses.

An interdisciplinary perspective was fundamental, since educators in general education institutions are not exclusively concerned with certain diversities, i.e. only with children with a high aptitude, with a visual impairment, with a migration background, with a special need for support, but are, on

the other hand, confronted with groups that reflect all the facets of diversity and the corresponding problems and tasks of inclusive and intercultural education (Graumann, & Pewsner, 2015; Graumann, 2018; Winzer, & Mazurek, 1998; 2017).

This became more than evident when contributions began arriving from authors in many disciplines and practical fields for a publication as a part of an Erasmus project headed by Olga Graumann. They came from Russia, the Ukraine and Belarus and ranged on topics from, for example, PTSD, charitable inclusion, teacher-parent cooperation and reformed, inclusion-based teacher education and training programmes (Graumann, Algermissen, & Whybra, 2016).

For the Ukrainian author Irina Demchenko, inclusive education is one of the most important paths to practical humanism and social justice. It means modern education for all, (1) regardless of age, gender or ethnic affiliation, but (2) serious recognition and differentiated practical inclusion pedagogy with attention to the individual abilities and developmental peculiarities of each person (Demchenko, 2015). This corresponds to the ideas of the Humanization of Education and the respective statements in the EU countries of Germany, Austria, Italy, Finland, Russia, Ukraine, Belarus and other Eastern European countries who have joined the UNESCO demand for inclusion in the field of education according to the „Salamanca Declaration“ (1994), the "Convention on the Rights of Persons with Disabilities" (CRPD) (2006).

Not only now, but also in the future, inclusion will be a humanistic task for educational institutions and their teachers and students. It is important to recognise that inclusion of children and young people in educational institutions can only be successful and meaningful if the necessary conditions are created, and that inclusion in schools is based on three pillars: framework conditions, professionalism and consideration of individual requirements.

(1) The personnel, structural and material framework conditions must be in place. This means that teams of teachers consisting of subject teachers, special and social pedagogues must be formed as required. The rooms must be designed and equipped according to the needs of the pupils. The learning groups may only be as large as individual learning is still possible.

(2) Teachers must have sufficient didactic and diagnostic skills. They must be able to reflect on their theoretical approaches and work in a team.

(3) Learning in a heterogeneous learning group does not make sense for every pupil and a special institution specifically geared to his needs is not conducive for every pupil. It is necessary to find the right school for pupils with special learning and living conditions (Graumann, 2018, p. 13 ff and p. 278 ff).

However, although school inclusion is a government priority in many countries around the world, there are also critical voices. Wolfgang Jantzen, a renowned advocate of the idea of inclusion in Germany, wrote as early as 2012: "The debate about inclusion has already taken on a dimension in many places that can only be sarcastically described as a new religion" (Jantzen, 2012, p. 36), and Otto Speck speaks of inclusion becoming an article of faith and that the proclamation of inclusion has sometimes taken on missionary features (Speck, 2010, p. 68). Scientists who have so far advocated inclusion are now in part strongly critical of the concept. Birgit Herz e.g. points out that the demand for school-based inclusion ignores the reality of society as a whole:

Here, contrary to better knowledge, the hope is nurtured that inequality structures and exclusion problems in society as a whole could already be overcome by school education programmes. (...) There is something alien about promoting inclusion as a vision if the economic and political framework conditions are not specified at the same time, which have hitherto prevented the realisation of 'inclusive education' both nationally and internationally (Herz, 2012, p. 47).

Despite all the controversial views, the inclusion debate must not be allowed to split into advocates and opponents, as is often the case at present. Humanisation of education means that the debates within pedagogy and educational policy must focus exclusively on which organisational form of teaching and learning and which didactic measures can be used to promote the development of the respective pupil in relation to his or her individual prerequisites. Inclusion at school cannot solve the problem of the social exclusion of people. Nevertheless, it seems to be possible that "a successful inclusive education could (...) contribute to a more tolerant and open society - towards people from another country as well as towards people with disabilities." (Graumann, 2018, p. 282).

A disability is of course different from other forms of diversity and cannot simply be considered as a cross-cutting issue along ethnic and religious lines, language and culture, etc. (Winzer, & Mazurek, 2017, p. 225). The two terms inclusion and integration are often used in the same breath (integrative inclusion), and there is also talk of "Inclusion's confusion" (Gilham, & Williamson, 2014). On the one hand, the independence of the two concepts is to be seen, on the other hand they stand in an original, undeniable connection to each other.

In the specific context of this article, we will deal further with aspects of (inter-)cultural integration, also with the increasing cultural heterogeneity, which since 2015 has been especially, but not only, valid for Germany and some other Central and Western European Countries.

### *Migration, integration and intercultural education*

In addition to the processes of globalization, internationalization, social transformations, economic protectionism that are already taking place, migration movements pose a particular challenge in the context of humanizing education. Many people from crisis and war zones in Africa and the Middle East are still looking for help and protection in Germany, Italy, Spain, France, and other European countries. They hope for asylum, cultural and religious tolerance, and improved prospects. However, in the societies of the host countries they are often faced with populist right-wing movements, irrational intolerance, ignorance, xenophobia and even aggressive actions in particular against refugees (Golz, 2015, p. 132). Diffuse nationalist and xenophobic positions stir up sentiments mainly against an alleged "islamization of the occident", associated with "a frightening lack of information (...) about the real cultural and ethnic composition of the population". The alleged threat to national identity through cultural and extremist alienation and the frustration with social problems, etc. "is being exploited for blind hatred of anything foreign as well as refugees, asylum seekers and other marginalized people in society" (ibid.).

However, we also see that the overwhelming majority of the German population, for example, still advocates a reasonable immigration policy (e.g. following the Canadian model) and considers the reception of refugees and asylum seekers to be not only a humanistic duty but also an enrichment for an aging society and the commercial future.

Humanization of education is also peace education which should not just focus on schools, but uncover and not ignore the current social and economic causes of xenophobia and nationalism located primarily in the middle and older generations. There are new (gerontagogic) challenges, to empower older generations for contemporary and reasonable debate of cultural and religious differences (Marschke, 2005). The real socio-psychological, economic, media and other causes for ideological aberrations need to be explained comprehensively and the results of an open democratic discussion be used for the consolidation and the benefit of human, democratic societies. We see, not only in East Germany after re-unification, the special responsibility and duty of all humanists and democrats (secular humanists, humanistic atheists, religious humanists and other humanistic and democratic actors and groups) to name similar positions at least on essential current issues in order to bundle their activities against misanthropy without reservations and

fears of contact. It is important to make this life meaningful through better understanding of ourselves, our history, our achievements, and the outlooks of those who differ from us.

The humanization of education is also intercultural (multicultural) education, a theoretical and practical task

to create equal educational opportunities for students from diverse racial, ethnic, social class, and cultural groups (...), to help all students to acquire the knowledge, attitudes, and skills needed to function effectively in a pluralistic democratic society and to interact, negotiate, and communicate with peoples from diverse groups (Banks, & Banks, 1995, p. XI).

People who have immigrated from other cultures are rightly called upon to integrate themselves into a given democratic society. Some people talk about integration, but assimilation is meant; the differences are ignored. Integration means the acceptance by immigrants of the laws and lifestyles of the host country and the possibility of their participation in social life - without the pressure to completely abandon their own cultural identity. A demanded assimilation ultimately means a one-way process where the newcomers from different cultures give up their culture to adopt the ways of the majority culture or modify it to become acceptable to the given society. There are cases of intentional, voluntary assimilation among immigrants, e.g. of the Russian Germans, people who emigrated from Germany to Russia in the 18th century and re-migrated to Germany on a massive scale after the social upheavals of 1989. In slightly different ways, this also affects Jewish immigrants from the former Soviet Union in Germany (Golz, & Ostrovskiy, 2007/2008). But here too, rapid assimilation or identification with national and cultural aspects of life in the host country was often associated with difficulties. In general, a short-term expectation of assimilation is not only an expression of a lack of realistic insights and experience with migration policy developments, but also an inhumane imposition on immigrants – often leading them into segregation.

One of the most decisive prerequisites for the successful integration of migrants is and remains the acquisition of the language of the host country, which is particularly evident in countries such as Germany, France, Spain, Italy etc. However, this only works if the appropriate opportunities for linguistic qualification as well as social and intercultural contact with members and organisations of the host society are created, and if increasing importance is attached to foreign language teaching from primary school onwards at the latest. Here important aspects of the humanisation of education, e.g. intercultural-communicative empowerment, integrative and inclusive processes, can best be facilitated (Whybra, 2000, p. 153).

In this context a few remarks about the difference between "national identity" mentioned above and „cultural identity“ and their changeability in integration processes, not least for linguistic reasons. The feeling of belonging to a culture (or even to more than one culture) not only gives people a psychological orientation, it is also important for their ability to act in a complex and diverse society. However, the development of a cultural identity is often associated with change. From a cultural-universalistic point of view we are connected in society by an identity, a basic consensus, without which people cannot live together permanently in a given nation. From a cultural relativist perspective the question arises whether a community based on (national) identity is really a community, whether a society composed of variations of a universal and identical majority can exist in the long term. Humanization of Education means, in this respect, that one's own identity and the identity of others must be accepted in their development (Masschelein, 1995; Demorgon, 1999; Golz, 2004, p. 14).

## Digitalisation as the de-humanization of education?

One of the greatest challenges for the preservation of a humanistic educational concept now and in the future is undoubtedly digitalization. As quoted above and mentioned in the founding

declaration of the "International Academy for the Humanization of Education" (1995), it has been said quite pessimistically that "The 'tradition of humanism' has almost faded in the face of the omnipotence of technological development and global ecological catastrophes. Modern technology de-humanizes human relations." (Resolutions, 1995, p. 2; see also: Berulava, 1995; Golz, 2012). It is amazing how similar this almost quarter-century old statement is to that of current scientists. Some of today's educationalists see in digitalisation the danger of a de-humanisation and economisation of the education system in a way that contradicts humanistic principles. The educational and social scientist Ralf Lankau wrote:

Instead of economizing and digitalizing the education system, we need humanization and re-individualization in the humanistic tradition. Technology and control do not lead to knowledge and ability, (...) it is rather the dialogue between teachers and learners (Lankau, 2015).

Some of those quite critical remarks towards an increasing digitalisation of life, especially in school, may not represent the majority opinion of society, but can and should inspire reflection on how to deal with this issue in the future (see also: <http://futur-iii.de/2017/06/01/falsch-zitiert-und-falsch-gemeldet/>).

These discussions seem to be intensifying, which can be shown, for instance, by more current critical statements in an "Alliance for Humane Education: Criticism of the Digital School Pact: Potemkin villages of German education policy or: belief in technology as a pedagogical oath of revelation" (see: Bündnis für humane Bildung, 2019).

Just recently Götz Eisenberg stated that the ability to make meaningful use of digital media

is not acquired on the Internet or by wiping over tablets and smartphones. One learns to think through direct contact and exchange with people present in the flesh, through reading and the joint appropriation of what has been read (Eisenberg, 2019).

Mikhail Berulava, the then founder of the "International Academy for the Humanization of Education" mentioned above, is the current head of two universities in Moscow and Sochi, and a deputy in the Russian Duma. He was recently asked by the authors of this article how he would define the importance of the main ideas of the Humanization of Education now, in the age of massively increasing digitalization. A little later, after consulting with his colleagues, he replied in an e-mail to R. Golz from May 30th, 2019: "In view of the increasing aggressiveness in parts of society, the task of education is not only to develop technical internet competences, but first of all to provide orientation for human values, behaviour and communication." And both Mikhail and Galina Berulava had recently called in an article for "a detailed philosophical, sociological, and psychological analysis of the role of modern electronic means for the formation of personality." (Berulava, & Berulava, 2019, p. 53) This can at least be seen as a positioning of some Russian scientific and political actors, although it is not representative yet.

On the other hand, there seems to be no doubt that in most countries, including Russia, the majority of people who deal with the phenomenon of digitalisation would agree that

the pros outweigh the supposed and actual cons of digitalisation, whenever it is also clear that the role of the teacher-pupil relationship is extremely important for a flexible learning environment that breeds successful, collaborative and enthusiastic learning (Himmelsbach, 2019).

The American educationalist Marianna Richardson has also expressed herself convincingly in this sense and on the basis of her practical experience using the example of social media in the college classroom, entering upon both the challenges and advantages of digitalization in view of "students

who could not previously afford it or who geographically had no access to it." (Richardson, 2015, p. 209)

There are, of course, also absolutizations of the advantages of digitalization in educational institutions associated with a supposed reduction in the role of the teacher. However, humanizing education was, is and remains tied to the teacher-learner relationship. In this respect, it is perhaps not too far back in time but fitting to our subject matter when we reintroduce the position of Konstantin D. Ushinsky (1824-1870) mentioned above. He was convinced that a teacher must know the person as he or she really is, only then can he educate, and it was also his clear position that the personality of the teacher cannot be replaced by books, school materials etc. (Ushinskiy, 1963, p. 51). Perhaps he would have written today that the personality of the teacher cannot be replaced by the Internet ... (see more about Ushinskiy in: Golz, 2003, pp. 43-46; Ellis, Golz, & Mayrhofer, 2015).

## Conclusion

Irrespective of all useful, necessary, today and in the future indispensable technical innovations and irrespective of historical, current and future social upheavals and innovations - the main ideas of the humanization of education remain a permanent interdisciplinary task with ever new challenges, especially with regard to individualized and socially responsible as well as inclusive and integrative learning. This also includes the defence against over-emphasised national interests and other de-humanisation tendencies mentioned above.

And there is no shortage of other new challenges e.g. the huge and omnipresent problem of climate change and its implications for education. Due to the space available and the complexity of this topic we would just like to mention the worldwide youth movement "Fridays for Future". Many pupils and young people all over the world continue to not go to school on Fridays but to demonstrate for concrete political measures to save the environment, and the politicians and teachers, once again, don't really know yet how to deal with it ... However, the support of this humanistic and democratic youth movement by the "Scientists for Future", and a growing number of members of the older generations gives hope for further constructive and effective reactions in politics, society and innovative environmental education.

There are many unanswered questions, that's life, and it will remain exciting, by the way, also with regard to the existence of the "International Academy for the Humanization of Education" which is currently endangered for financial reasons as an organization. But what about its basic ideas and the further development of its content and terminology, especially in times of social upheaval? Can we only consider an innovation once it has finally proven its worth? (Ellis, 2005, p. 202; see also Ellis, & Bond, 2016, p. 171). Such and other imponderables are often the historical fate and significance of innovations.

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Margaret Winzer & Kas Mazurek (Canada)

# Inclusive Schooling for Students with Disabilities: Redefining Dialogues of Diversity and Disability in the Canadian (Alberta) Agenda

**Abstract:** Inclusive education for students with disabilities is beset by foundational problems often related to conflicting definitions. UNESCO, a lead agency, speaks to accommodating diversity; a parallel conversation is preoccupied with disability. This paper is situated at the intersection of diversity, disability, and inclusive schooling. It focuses on the present tendency to conflate disability with diversity to conform with UNESCO's version of inclusive schooling. As a case study, we use the Canadian province of Alberta where a recent set of proposals aimed at reforming special education rebranded disability as diversity and promised inclusive schooling as a solution to mounting diversity in the schools.

We explicitly argue that Alberta's sustained muddle of intent related to inclusive schooling arises, at least in part, from efforts to follow UNESCO's broad prescriptions and assimilate disability into diversity. Misassumptions about the uniqueness of disability relative to other forms of diversity and difference have spilled over to blanket disability and diminish the importance of schooling for those disabled in the political space. Implicitly, the data are generalizable to other countries pursuing an inclusive agenda, particularly those in Europe.

**Key words:** diversity, disability, inclusive schooling, province of Alberta

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**摘要** (Margaret Winzer & Kas Mazurek: 残疾学生的全纳教育：加拿大[阿尔伯塔省] 议程中关于多样性和残疾对话的新定义)： 残疾学生的全纳教育通常受制于与矛盾的定义有关的一些基本问题。领头机构联合国教科文组织支持多样性并与残疾进行平行对话。本文处在多样性，残疾和融合教育的交界处。它着眼于当前将残疾与多样性结合起来的趋势，以符合联合国教科文组织关于融合式学校教育的模式。作为案例研究，我们列举加拿大的阿尔伯塔省，在那里的一系列特殊教育改革提案中提出了残疾作为多样性的说法，并承诺融合教育可以解决学校日益增长的多樣性。我们明确指出，阿尔伯塔省与全纳教育有关的持续性困惑至少部分是由于遵循联合国教科文组织的一般规则，并将残疾纳入多样性的努力。与其他形式的多样性和差异相比，对残疾的独特性的误解已扩大到一般残疾，并降低了在政治舞台上为残疾人提供学校教育的重要性。数据可隐式地推广到追求包容性议程的其他国家，特别是欧洲国家。

**关键词：**多样性，残疾，全纳教育，阿尔伯塔省

**摘要** (Margaret Winzer & Kas Mazurek: 殘疾學生的全納教育：加拿大[阿爾伯塔省] 議程中關於多樣性和殘疾對話的新定義)： 殘疾學生的全納教育通常受制於與矛盾的定義有關的一些基本問題。領頭機構聯合國教科文組織支持多樣性並與殘疾進行平行對話。本文處在多樣性，殘疾和融合教育的交界處。它著眼於當前將殘疾與多樣性結合起來的趨勢，以符合聯合國教科文組織關於融合式學校教育的模式。作為案例研究，我們列舉加拿大的阿爾伯塔省，在那裡的一系列特殊教育改革提案中提出了殘疾作為多樣性的說法，並承諾融合教育可以解決學校日益增長的多樣性。我們明確指出，阿爾伯塔省與全納教育有關的持續性困惑至少部分是出於遵循聯合國教科文組織的一般規則，並將殘疾納入多樣性的努力。與其他形式的多樣性和差異相比，對殘疾的獨特性的誤解已擴大到一般殘疾，並降低了在政治舞台上為殘疾人提供學校教育的重要性。數據可隱式地推廣到追求包容性議程的其他國家，特別是歐洲國家。

**關鍵詞：**多樣性，殘疾，全納教育，阿爾伯塔省

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**Zusammenfassung** (Margaret Winzer & Kas Mazurek: *Inklusive Beschulung für SchülerInnen mit Behinderungen: Neudefinition des Dialogs über Vielfalt und Behinderung in der kanadischen [Alberta] Agenda*): Inklusive Bildung für Schüler mit Behinderungen wird von grundlegenden Problemen heimgesucht, die oft mit widersprüchlichen Definitionen zusammenhängen. Die UNESCO, eine Lead-Agentur, spricht sich für die Berücksichtigung der Vielfalt aus; ein paralleles Gespräch beschäftigt sich mit Behinderungen. Dieses Papier befindet sich an der Schnittstelle von Vielfalt, Behinderung und integrativer Schulbildung. Es konzentriert sich auf die gegenwärtige Tendenz, Behinderung mit Vielfalt zu verbinden, um der UNESCO-Version der integrativen Schulbildung zu entsprechen. Als Fallstudie verwenden wir die kanadische Provinz Alberta, wo eine Reihe von Vorschlägen zur Reform der Sonderpädagogik die Behinderung in Vielfalt umbenannt und eine integrative Schulbildung als Lösung für die wachsende Vielfalt in den Schulen versprochen haben.

Wir argumentieren ausdrücklich, dass Albertas anhaltende Absichtslosigkeit im Zusammenhang mit integrativer Schulbildung zumindest teilweise auf Bemühungen zurückzuführen ist, den allgemeinen Vorschriften der UNESCO zu folgen und Behinderungen in Vielfalt zu integrieren. Missverständnisse über die Einzigartigkeit von Behinderungen im Vergleich zu anderen Formen von Vielfalt und Differenz haben sich auf eine allgemeine Behinderung ausgeweitet und verringern die Bedeutung der Schulbildung für Menschen mit Behinderungen im politischen Raum. Implizit sind die Daten verallgemeinerbar für andere Länder, die eine integrative Agenda verfolgen, insbesondere für diejenigen in Europa.

**Schlüsselwörter:** Vielfalt, Behinderung, inklusive Schulbildung, Provinz Alberta

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**Аннотация** (Маргрет Винцер, Кас Мазурек: *Инклюзивное обучение для учеников с ограниченными возможностями: к вопросу о трансформациях в дискуссии о многообразии и детях с нарушениями здоровья – на примере проекта в канадской провинции Альберта*): Инклюзивное образование для детей с ограниченными возможностями связано со многими принципиальными вопросами, которые, в свою очередь, порождают достаточно противоречивые определения этого явления. ЮНЕСКО, коммуникационное агентство Lead выступают за то, чтобы концепт «многообразия» учитывался на всех уровнях; параллельно разворачивается дискурс о нарушениях здоровья. Проблема находится на стыке концептуальных областей «Многообразие», «Нарушения здоровья» и «Интегративное образование». В данной работе обозначается тенденция совместить две концептуальные области – как это находит свое отражение в положениях ЮНЕСКО относительно интегративного школьного образования и как это влияет на целевую группу «школьники», а также приоритеты, направления, ежедневный практический опыт реализации данной концепции.

В качестве примера рассматривается канадская провинция Альберта, в которой было сделано сразу несколько предложений по реформе специальной педагогики; словосочетание «нарушения здоровья» было заменено на «разные возможности», а интегративное школьное образование стало рассматриваться как способ решить насущные вопросы, связанные с увеличением количества «особых» детей в школах.

Мы настаиваем на той точке зрения, что выбранный в Альберте подход к интегративному образованию в определенной степени объясняется желанием следовать общепринятым предписаниям ЮНЕСКО и стремлением подвести вопросы нарушения здоровья к концепции многообразия. Разногласия по поводу специфичности нарушений здоровья по сравнению с другими формами многообразия и дифференциации перебрались на общую проблематику, связанную с нарушениями здоровья; тем самым они умаляют роль школьного образования для людей с ограниченными возможностями, а это важно в том числе для политической повестки. Данные, полученные в результате изучения опыта канадской провинции, могут быть экстраполированы для исследования данного вопроса в других странах, где обсуждается концепция интегративного обучения; особенно это касается европейских государств.

**Ключевые слова:** многообразие, нарушения здоровья, инклюзивное школьное образование, провинция Альберта

## Introduction

As part of a general global demand to establish social justice, equity, and diversity as center pieces in policy making, inclusive schooling for students with disabilities (special education needs) has emerged as a widespread reform. Given its lengthy pedigree and increasingly central place in global and national education policy discourses, it is not surprising that the inclusive schooling movement has enthralled special education and involved many levels of general schooling.

That said, a universally accepted definition or any legal consensus about how to define inclusive schooling does not exist (de Beco, 2014). Rather, sharply different and often non-compatible versions ask different questions. As examples, but far beyond the scope of this paper, is the human rights ethos propagated by the *Convention on the Rights of Persons with Disabilities* that, in fundamental ways, differs from the American thinking that students with disabilities receive education in the most appropriate settings, referred to as the least restrictive environment (LRE). Other versions ask 'How much inclusion is a good thing' and pit *partial inclusion* (related to the LRE) against doctrinal and extreme positions known as *full inclusion*, represented by the idea that all students with disabilities, at all times, and at all levels, must be taught in general classrooms.

These two versions are at the heart of this paper which sets out to provide an example of the changing dialogue on diversity and disability within the context of inclusive schooling. We have spoken to the challenges that lie at the intersection of disability, diversity, and inclusive schooling previously (Winzer & Mazurek, 2017). This paper recharges the conversation but moves away from the theoretical underpinnings to largely practical aspects. The discussion is set in our home province of Alberta where a recent series of proposals sought to rebrand disability as diversity and promised inclusive schooling as a solution to mounting diversity in the schools.. Alberta Education, the responsible ministry, claimed that the new agenda promoted the co-existence of diverse students in schools by moving "from tolerating difference to valuing diversity" (Alberta Education, 2010b).

This brief paper explicitly focuses on the proposals, explains the core ideas with reference to the underlying notion of subsuming disability under umbrella concepts of diversity, difference, and disadvantage, and spotlights some salient outcomes. Implicitly, it illustrates the tensions between education reforms that promote equality for all and those that are more concerned with the needs of individual consumers. We broadly conclude that Alberta's set of reforms were muddled, plagued by a lack of coherent interplay between legislation and practice on pivotal issues. The agenda seemed to be largely fruitless in consolidating inclusive schooling although there is evidence that it did create a significant reduction in official initiatives and urgency about disabled students and their needs in the political space.

Alberta Education's ambitious policies to handle disability and diversity within one inclusive system offer an important lesson. The ensuing dilemmas are mirrored in other countries where the dynamics of diversity have become an increasingly important category for action and where many jurisdictions have undertaken the mission to welcome and engage all marginalized and disaffected groups and to support diversity in the schools.

## Case study

From the late-1980s on, the province of Alberta underwent reform activity in the direction of an inclusive schooling agenda, but one with disabled students as the center piece of policy making. In 1993, inclusive schooling was officially codified when Alberta Education crafted a policy that emphasized

the general classroom as the first placement option to be considered for identified disabled students (see Alberta Education, 2004). Official endorsement of inclusive practices subsequently led to the dismantling of separate settings such as resource rooms and special classes; many, but not all, special schools were closed in favor of students sharing the mainstream. The possibility of greater general classroom access led to significant increases in the diagnosis of disability, particularly within the severe range. The numbers of disabled students in the general system grew from almost 10 percent of total enrolments in the late-1980s to 13.4 percent by the mid-2000s. Students were identified and funded within a complicated coding system that recognized many different types of disabilities and degrees of severity. The number of eligibility categories for special services increased from 13 in 1992 to 19 in 2008 (Alberta Education, 1989; Alberta Education, 2008b, c).

At the same time, Alberta's changing demographic scenario saw schools developing into complicated settings of racial, linguistic, ethnic, cultural, social, and religious difference with twice the level of classroom complexity compared to the average of all other jurisdictions in the Organization for Economic Co-operation and Development (OECD; ATA, 2015). To add even more complexity to the mix, cycles of austerity routinely appeared. The 1990s in Alberta were characterized by a long chain of conservative economic policies that saw systems increasingly endorse market forms and accountability dynamics. Concerns about public spending increased, together with significant demands to reduce costs through greater efficiency and accountability.

Beginning in 2005, Alberta Education seriously embarked on a series of far reaching and fundamental reforms that spanned a decade. The multiple proposals linked a number of pressing policy issues into one debate. They addressed ideological commitment (social justice and equity), needs within the education system (diversity), individual needs (disability), structural changes (inclusive schooling), and external pressures (the politics of austerity). In the reform mode, policy makers formed at least temporary alliances with ideology and social goals; they spoke to "value-based" approaches (Alberta Education, 2010b). But, whatever the anchoring mechanisms, financial calculus was the driving force. Reform was largely proxy for what commentators described as an exercise in "how best to manage and plan for the cost of the other" (Gilham & Williamson, 2014, p. 557).

There are 375 distinct jurisdictional authorities (districts or divisions) in the province of Alberta (Alberta Education, 2016). In 2001, Alberta Education handed the responsibility for making funding decisions about individual disabled students to the school authorities. But government spending had become leaner and meaner and the resources devoted to education seriously declined. In their remit to balance aid for general education and to fund inclusive practices, Alberta's schools developed a habit of identifying mounting numbers of students within the severe categories of disability, particularly emotional disturbance and behavior disorders. Why? Because a designation of severe disability produced high financial rewards- a bounty of \$16,465 in additional funds for each identified student (Charette, 2008; Graham & Jahnukainen, 2011).

In the fall of 2007, Alberta Education undertook a review of the 16,000 files that school boards claimed met the severe disability criteria. Analyses of the funding arrangements found markedly inconsistent application of severe disabilities identification across the province; only 56 percent of students had bona fide severe disabilities that matched funding criteria (Alberta Education, 2008b). As a direct result, the Alberta government underlined the need to improve the entire education system and specifically called for a thorough examination of the special education enterprise (Alberta Education, 2008a).

After multiple consultative reviews and public forums that involved approximately 1000 stakeholders (Alberta Education, 2010a), a framework titled *Setting the direction*, later *Action on inclusion*, emerged.

The documents were part of and prologue to a continuing chain of reform proposals (e.g., Alberta Education, 2009, 2010b, 2011, 2012b, c). All were peppered with platitudes about diversity and inclusion. All promised to address the massive diversity in the schools, expand and refine inclusive schooling, streamline special education, rethink fiscal arrangements for students with disabilities, and stem unsustainable public spending. There was lots of talk about classification, coding, labeling, and assessment.

Overall, the set of proposals designed to fundamentally alter the directions of inclusive schooling in Alberta articulated a number of notable discontinuities from past practice. We identify those most germane to the present discussion below.

***Diversity is a foundation of inclusive schooling.*** The original conceptual blueprint to guide inclusive schooling in Alberta was built solely on the need to accommodate disabled students based on the American model of the least restrictive environment. *Action on inclusion* and later documents changed course by downplaying the disability variable in favor of a broader set of reforms with a different policy intent.

Alberta Education's new proposals essentially dismissed the classic concern for students with disabilities in favor of privileging diversity. Policy makers held that "Inclusion is not just about learners with special needs;" rather, inclusive schooling is "an attitude and approach that embraces diversity and learner differences and promotes equal opportunities for all learners in Alberta" (2017, p. 1). Loreman (2018) describes the target audience laid out by Alberta Education as "a laundry list of categories of diversity" (p. 2); that is, "race, religious belief, colour, gender, gender identity, gender expression, physical disability, mental disability, family status or sexual orientation, or any other factors" (Alberta Education, 2015b).

***Disabilities are neutralized.*** The diversity framework characterizes disability as simply another identity representation to be pursued alongside common markers such as culture, gender, ethnicity, language, and social class. Such a model makes diversity proxy for commonality and tends to neutralize disability. On one hand, it overlooks the uniqueness of disability relative to other forms of diversity, implies that disabilities are not really problems to learning, and fosters a perverse disinclination to confront the real challenges facing students with disabilities. On the other, diversity demands uniform treatment. Because all students are diverse and in need of various supports and practices, disability does not really mean special needs. Under a new Alberta *Education Act* (2012a), for example, there are no longer students with disabilities but students "in need of specialized supports and services."

***Reform would restructure schools and build a single inclusive education system.*** Alberta Education (2009) proposed a system in which diversity and disability would function within "one inclusive education system where each student is successful" (Alberta Education, 2009). Later, it spoke to "shifting from a dual system of mainstream education and special education to a system that takes responsibility for all students" (Alberta Education, 2012b). The documents also promised that all students would "have equitable opportunity to be included in the typical learning environment and program of choice" (Alberta Education, 2010a). *Typical*, referring to students in classes with their age peers with instruction modified within the Alberta Program of Study (Alberta Education, 2010b) soon morphed into *an appropriate learning environment*. Now inclusion did not "necessarily mean that every student registered in the Alberta school system will be placed in a regular classroom" (Alberta Education, 2012a). It seemed that a variety of settings, from segregated classes to the general classroom would serve.

## Outcomes and consequences

The above sketch of the attempted changes show that little about Alberta's reform agenda was linear or precise. On the contrary. Researchers critique "Inclusion's confusion in Alberta" (Gilham & Williamson, 2014) and characterize the education landscape as riddled with a muddle of changes in definitions and directions. The so-called reform climate is marked by lack of coherence, short horizons, unfulfilled promises, and repeated calls for events that do not happen, and few notable successes. The agenda is consistently an object of re-recognition. The Alberta Teachers' Association (ATA) chides that since the mid-1990s Alberta Education has been on a cycle where it is "just doing the same thing over and over" to the extent that its reform agenda is "continually reoccupying the same space with an unending series of revisions, scribbling and new texts" (ATA, 2014, p. 54).

Alberta's decade of reform for students with disabilities ended rather abruptly in 2015 partly because of the election of a new provincial government, partly because changing political discourses elevated other priorities and dampened enthusiasm, and partly from what seems to be a pervasive ennui with the whole concept of inclusive schooling for those with disabilities. Following, and since 2015, Loreman (2018) complains that there has been an "almost complete absence of action in policy and legislation with respect to improving inclusive supports for learners with disabilities." Inclusive education, he holds, has dropped "to be the lowest of government priorities" (Loreman, 2018, pp. 3, 4).

Researchers have warned that incorporating broad views of inclusion designed to encompass all forms of diversity creates the risk that the interests of those with disabilities may become secondary or be overlooked in favor of other minority interests (e.g., Norwich & Koutsouris, 2014). Prescient words for the Alberta scenario where inclusive schooling went from being a very specific focus with a very specific audience to a focus on simply providing children with disabilities an education (ATA, 2014). For example, what had previously been a separate department for inclusive learning within Alberta Education was rolled into the general operation of the schools (ATA, 2015). Alberta's present Inclusive Education Policy (Alberta Education, 2015a) "represents the bare minimum" (Loreman, 2018, p.3). It is a mere two paragraphs long and Loreman (2018) suggests that the actual policy is, in fact, not really a policy. The language used is vague and broad, it does not guide practice, does not actually require schools to do anything, and does not foreclose any and all other options.

What Alberta Education describes as inclusive schooling is often decoupled from meaningful policy and practice. Critics carp that "inclusive education in Alberta continues to be stuck in the 1990s" (Loreman, 2018, p. 3). Alberta's schools still rely on the Ministerial Order first developed in 1993 (mentioned earlier), and reiterated in the 2004 *Standards for special education* that specify that students are entitled to inclusion in the general classroom as the first option on a menu of options. At least some jurisdictions interpret the 2004 regulations to mean that segregated special education programs are acceptable provided consideration is first given to placement in inclusive contexts. Moreover, prescriptions about physical placement in the reform documentation are vague, flexible, and changeable, with various mentions of 'typical,' 'appropriate,' 'grouped programs based on specific needs,' and 'a mix of the two experiences' (Alberta Education, 2011; ATA, 2011; Gilham & Williamson, 2014).

Certainly, Alberta boasts a remarkably broad public education system with much school choice. But it is unclear exactly what inclusive schooling means. In general, traditional mechanisms remain doggedly in place in an unchanged school system. Often, so-called inclusive practice is little more than reconstituted integration. For example, although Alberta Education (2010b) promised to move away from medical models, identification, classification, and placement are often steeped in notions of individual

pathology. Further, any intent of all students within general settings is far from being realized. Instead, an actual approach of segregated and inclusive forms of education is maintained in both policy and practice (Gilham & Williamson, 2014; Loreman, 2014).

Alberta Education's list of diversity categories (2015b) included mental and physical disabilities but elided specific references to students presenting with emotional or behavioral challenges, an increasingly visible problem in contemporary classrooms. To accommodate children with such difficulties, segregated special education programs, anomalies in an inclusive system, are flourishing, particularly in urban areas. For example, Edmonton public schools have dozens of distinct sites for special education. Many are segregated classes that cater to students with behavior disorders, severe emotional problems, and autism. Similarly, the Catholic district has new plans for students with substantial behavior problems and severe autism who are not functioning well in typical classrooms. Some will be segregated in a designated school building; others will be referred to private schools (French, 2017).

## Postscript

This paper set out to discuss aspects of diversity and disability in inclusive schooling. We used Alberta's recent reform record as a case study to illustrate an increasing trend in contemporary special education- assimilating disability into diversity so that inclusive schooling caters to the vastly mounting diversity seen in the schools.

Alberta's inclusive education reform objectives seemed to be woven around varied currents of educational thought, social goals, and economic considerations. Issues surrounding equality, diversity, and the growing population of identified special pupils and their schooling were refracted through the prisms of financial calculus and the imperatives of the fiscal restraint. Attempting to reconcile the twin realities of diversity and disability within climate of austerity produced different paths to describe and direct inclusive schooling that hobbled a coherent vision. Even after a decade of initiatives to change the focus of inclusive schooling by rebranding inclusion as diversity, inclusive schooling in the province of Alberta remains a contested domain with a host of unresolved questions about which inequalities are the most important to address, who individuals with disabilities are, what is meant by inclusion, who is to be included, and what 'all' means on an everyday basis.

Alberta Education documents prioritize diversity while the field remains preoccupied with students with disabilities. Despite equity as the conceptual preference, the balance tips to disability as the priority. This continued tendency to focus upon students with disabilities and to downplay the needs of other diverse groups is a relatively common focus in countries of the global North. For example, while most European countries express an intention to realize inclusive education in accordance with the UNESCO vision, "the results of its implementation in practice are not at all convincing" (Haug, 2016, p, 14).

As a final note, we can say that Alberta Education idealizes the inclusion project as a process well underway. This paper argues that the promises became mired in a muddle of changing intent. There is presently insufficient policy attention to the ways in which disability is being addressed as the system dedicates itself- or attempts to- to diversity. Inclusion is a term employed at the level of policy making but features of provision chime with traditional forms of special education. A multilevel architecture remains in place that sustains a special system parallel to general education.

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*Manfred Oberlechner (Austria)*

## Fluidity and Education

**Abstract:** This article shows why and how fluidity educates and is therefore of educational relevance for student teachers. If education sees the developmental process of the whole person, with regard to his or her "humanity", as a life-long learning process, in which the individual expands his or her intellectual, cultural, creative and practical abilities and skills, then fluidity offers new perspectives for pedagogy. Education is then related to the subject's exploration of inner and outer fluid realities, as processes of learning or socialization in an increasingly fluid postmodern society.

**Keywords:** education, fluidity, postmodern society, migration, identity

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**摘要 (Manfred Oberlechner: 流动性与教育):** 文章讲述了流动性为何以及如何形成的, 并对师范专业的学生是具有教育相关性的。如果教育通过提高人的精神, 文化, 创造力, 实践技能和能力, 从"人性"的角度将"整个人"的发展过程视为一个终生学习的过程的话, 那么流动性就为教育提供了全新的视角: 教育即是指在一个不断流动的后现代社会中, 不同主题之间把内在和外在流动的生命体验作为学习的过程而进行的一种相互探讨。

**关键词:** 教育, 流动性, 后现代, 迁移, 身份

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**Zusammenfassung (Manfred Oberlechner: Fluidität und Bildung):** Der Artikel zeigt, warum und wie Fluidität bildet und für Lehramtsstudierende daher bildungsrelevant ist. Wenn Bildung den Entwicklungsprozess des "gesamten Menschen" im Hinblick auf sein "Menschsein" als lebenslangen Lernprozess begreift, indem er seine geistigen, kulturellen, kreativen und praktischen Fähigkeiten und Kompetenzen erweitert, dann bietet Fluidität für die Pädagogik neue Perspektiven: Bildung bezieht sich dann auf die Auseinandersetzung des Subjekts mit inneren wie äußeren fluiden Lebenswirklichkeiten als Lernprozesse in einer zunehmend fluiden postmodernen Gesellschaft.

**Schlüsselwörter:** Bildung, Fluidität, Postmoderne, Migration, Identität

\* \* \*

**Аннотация (Манфред Оберлеchner: Флюидность и образование):** В статье речь идет о том, почему и как флюидность реализуется в образовательном дискурсе и какое «образовательное» значение данный феномен имеет для тех, кто собирается работать преподавателем. Если в образовании процесс развития всей личности с проекцией на ее бытие рассматривается как процесс обучения в течение всей жизни, при котором расширяются духовные, культурные, креативные и практические способности и компетенции личности, то флюидность открывает для педагогики новые перспективы: образование в этом случае ориентировано на субъекта, который «разбирается» в своих внутренних и внешних флюидных реальностях, формирующих образовательные процессы в современном обществе, все более охваченном флюидностью.

**Ключевые слова:** образование, флюидность, постмодерн, миграция, идентичность

## 1. Experiences of migration in the fluid modern age<sup>i</sup>

Georg Simmel, when evoking the stranger or foreigner (*der Fremde*), does not visualize the migrant in the modern sense, but the Jewish trader in medieval societies: the foreigner is characterized by his peculiar in-between position. On the one hand, he joins a group which differs from his group of origin. But, on the other hand, he observes the new group more from the outside, while at the same time belonging to it. Nor does he carry on wandering, but the idea that he could do so makes him a little more independent:

The stranger is thus being discussed here, not in the sense often touched upon in the past, as the wanderer who comes today and goes tomorrow, but rather as the person who comes today and stays tomorrow, the potential wanderer: although he has not moved on, he has not quite overcome the freedom of coming and going. (Simmel, 1950, p. 402)

Refugees in particular remind us that the cocoon of our safe, familiar Western lifestyle remains unstable, and the elements which construct the "imagined communities" (Anderson, 2006) of the West are fundamentally fluid: "Inasmuch as the refugee, an apparently marginal figure, unhinges the old trinity of state-nation-territory, it deserves instead to be regarded as the central figure of our political history" (Agamben, 2000, p. 22). Annette Treibel also writes: "Refugee migration is by nature a 'transient' phenomenon, since refugees are more difficult to access on their routes, in refugee camps, and because of their often illegal and insecure status" (Treibel, 2008, p. 296, own translation). In terms of migration and fluidity, Robert E. Park's concept of the "marginal man" can also be read as a foreign marginal personality, in transition between life-worlds and in a constant cultural conflict. Park's prototype is the cosmopolitan Jew as a "cultural hybrid" with an uncertain status and undetermined group affiliation: he, too, embodies the foreign, which has something fluid about it (Park, 1928, p. 891).

Migration processes in themselves can be experienced as a radical uprooting into the unknown, and can thus also cause existential experiences of fluidity (Eisenstadt, 1953, p. 167). The subsequent reintegration into the new society – a complex and difficult process fraught with psychological strains – is therefore described by John W. Berry as acculturation stress, which can end in psychosocial fluidity (Berry, 2006, p. 287). In contrast, earlier migration theories in the US (the Chicago school) see fluid processes only as transitional phases on the ladder of assimilation, as "rites de passage" (Van Gennep, 1960) from one stage to the next. Fluidity as the final outcome of the migration process is disregarded, however, as it is undesirable in a conceptual world which is based on the assumption of fixed amalgamations (Milton Gordon, Gordon, 1964) or final dispersions in white US core society. This is in line with the cultural ideology of Anglo-conformity: at the end of the images of acculturation, assimilation or multiculturalism, there are always rigid ethnic cultural containers: "melting pots" or "salad bowls". Here the pressure to dissolve the original ethnicity is matched by the compulsion to commit to the new one; immigrants swim, as it were, from the container of origin to the target container, since the call for unilateral loyalty is contrary to fluidity (Han, 2018, p. 32).

Migration can trigger desocialization, which causes fluidity, if the familiar system of societal obligations becomes blurred. To counteract this, migration as a process of integration can be determined by processes of absorption, in the form of fixed institutionalizations (Talcott Parsons) of role expectations and behaviours in the target society. These fixative re-socializations mainly occur as learning processes regarding language, norms and values, serving to assimilate migrants to the demands of the receiving society. From this perspective, individual disorders of psychological fluidity can only be caused by "failures" in the unilateral adaptation owed to the "host country", when "errors" occur as immigrants are entering the institutional spheres of, for example, education or employment. In other words, when the pressure to merge while pushing forward into these institutions

leads to experiences of loss of individual and collective identity (which is, however, a crucial prerequisite for complete structural integration).

Processes of defining or determinative social integration and socially fluid disintegration should therefore be thought of as synchronous: they are processes that run parallel and are tangential to each other, which can become opposite movements. It is an illusion of fluid postmodernity to assume that the target countries of various migratory flows are themselves fixed, integrated containers: the Western industrial societies of the present, as Axel Honneth observed as early as 1994, are "in a situation for which 'disintegration' is the most apposite term, if we only take the current degree of privatization, the dissolution of the family, and the economic immiseration seriously enough" (Honneth, 1994, p. 10, own translation). The problem with the idea that integration determines social position is that the target societies themselves as a firmly homogeneous whole are an illusory construct, given the fluidity with which people suffer from prosperity into hardship, in the sense of slipping or sliding down. Linked to this is the ever-present threat of losing familiar milieus or social spaces, sociocultural capital, individual and social recognition, and thus self-esteem – accompanied by deep inner feelings of guilt: personal integrity is in danger of disintegration. These are signs of the fluid transformation processes which Western societies are exposed to today, and which have, first and foremost, a political dimension: "The interstitial passage between fixed identifications opens up the possibility of a cultural hybridity that entertains difference without an assumed or imposed hierarchy" (Bhabha, 1994, p. 5). This is also the starting point for considering what hybrid identity could mean today, or transcultural identity: an identity that makes each individual unmistakable, and which must be continually reinvented on the basis of difference from others (Strasser, 2006, p. 281). Experiences of migration can cause crises here, if it is not clear from the beginning how these processes will turn out for individual identity or for the identities of communities or societies. Because, on the one hand, migration can be the norm in everyday global reality, but at the same time it can be an incident or accident complete with crises and upheavals, which threatens the everyday life of individuals and societies. Sometimes migration is understood more as an opportunity, which brings forth new concepts of individual and social identity; sometimes it is seen more as an individual and collective loss of homeland, identity, and all that is one's own, which are in danger of being lost to the fluid. Migration is experienced as a destabilizing process if it threatens to dissolve the individual, or the community or society; in this case, individual consciousness is confronted with the fear of disintegration; the consequences of such radically perceived migration-induced changes can be existential, identity orientation disorders, or a transitory absence of structure in one's life.<sup>ii</sup> Salman Akhtar uses the term "third individuation" – as an extrapolation of Margaret S. Mahler's concept of separation-individuation in childhood, or Peter Blos's concept of the second individuation process of adolescence – to refer to the redefinition of individual identity after the transitory, fluid process of grieving and liberation associated with migration (Akhtar, 2014, p. 180). Migration should therefore never be understood solely as a change in location but is often accompanied by processes that combine grieving and liberation, or individual and collective changes in identity. Migration thus refers to constructions, deconstructions and reconstructions of ever-new streams of identity on an individual-personal and collective-structural level – processes that should be conceived of as fluid (Oberlechner, 2017). This perspective also gives a clearer view of inner realms of the personality, which are in constant motion and turmoil, and thus of the related Narcissistic illusion of mastery over the transient or fleeting self (*das flüchtige Selbst*).<sup>iii</sup>

The fluid self can then be expressed as a fear of the melting away or leaking of the inner personality or of the space-body or the "skin-ego" (Anzieu, 2016) – or more concretely as, for example, the fear of dissolving like sugar cubes in liquid (Tustin, 1986, p. 199).<sup>iv</sup> Here fluidity forms post-autistic qualities which are meant to help avoid fear (ibid.). For the inner, mental habitat encompasses various areas of the geography of the imagination (Donald Meltzer), including its dynamism in the time

dimension. This inner world should be thought of as multi-layered, fluid, and subject to distortions, which impede orientation: the inner and outer world can dissolve, merge together, and create psychotic fantasies. The intrusion of sensory impressions is then primarily perceived as destructive (Mätzler, 2012, p. 5; Tustin, 1990).<sup>v</sup> Thus the foreign can also be perceived as a stimulus and a threat in fluid postmodernity, as Zygmunt Bauman explains: "These sensations are then solidified into the figure of the stranger – as contradictory and ambiguous as the sensations themselves. Mixophilia and mixophobia vie with each other, locked in a competition neither can win" (Bauman, 1995, p. 138). The modern human, according to Bauman, is therefore the successor of the pilgrim, who wanders through the world as a desert, and is fragmented into four models: firstly, the stroller (*flâneur*), who merely imitates what the pilgrim did in all seriousness, but who is not only a man of leisure but a master of simulation. Secondly, the vagabond, once a nuisance to the settled order, now the prototype of a world that makes flexibility the condition for survival. Thirdly, the tourist, who, unlike the vagabond, cherishes his home as part of the safety package. And lastly, the player, for whom there is neither inevitability nor accident, neither laws nor lawlessness, neither order nor chaos (Bauman, 1995, pp. 92–98).

## 2. Migrant fluidity as the "superfluous"

The postmodern changes in the space-time regime have an impact on forms of social and individual self-relations, on the prevailing personality types or mentality patterns. "Forms of selfhood are set aflow because relations to things and other actors change along with the space-time regime as a result of the way the 'relation to the self' and the 'relation to the world' that subjects have are inextricably interwoven" (Rosa, 2015, p. 224). In the postmodern age this difference between here and there blurs into a perpetual "buzzing around" (*Herumschwirren*) (Han, 2014, p. 35). Constant migrations between places and time zones create a drifter's life, caused by constant elasticity or flexibility (Richard Sennett, 1998) in conditions of increasingly global acceleration (Hartmut Rosa, 2015). Migration has thus become a process of ongoing, flexible adaptation, a temporal drifting. The always flexible and fluid human capital corresponds perfectly to the ever-accelerating mobility and flexibility of postmodern economic activity: people function according to tight time regimes; but their temporal self-certainty congeals, giving way to a general temporal unstructuredness, in conditions of "polar inertia" (Virilio, 2000). Virtual online realities further liquefy this feeling of space and time within the risky society of the new type of capitalism, which seeks to deregulate time and space ever further (Sennett, 1998, p. 84).<sup>vi</sup>

In this process, refugees are particularly prone to "liminal drift": they drift helplessly and unstopably in a "negative flow" in an in-between zone, and do not know, cannot know, whether this state is transitory or permanent. The inner and outer loss of control over time intensifies the melting of their inner certainties: "They will never be free from a gnawing sense of the transience, indefiniteness and provisional nature of any settlement" (Bauman, 2007, p. 38). If refugees are also seen as the epitome of superfluity, because they no longer provide any benefit; if refugees are regarded as a superfluous stream of refugees, a flood, a faceless mass stealing Western identity, then the association with litter or waste contains a threat: it puts an end to all individuality, all differences and specificities. "Fluid waste" requires no fine distinctions and subtle nuances.

The condition of the refugee – thrown naked into the flow of life, without the anchor of a social role – is at the same time a general aspect of *our* life in liquid postmodernity (Bauman, 2007, p. 47), a long-term temporary form of life for all of us. Like the economic power elites, refugees – and to an increasing extent all of us – are no longer tied to any fixed places, like them, we are unstable and unpredictable. We ourselves are becoming the epitome of unfathomable space, in which the current precarity of human existence has its roots: "Seeking other, more adequate outlets in vain, fears and anxieties slide off targets close to hand and re-emerge as popular resentment and fear of the 'aliens

nearby" (ibid., p. 48). Europe, the union of fortress states, paints a picture of an impoverished "flood of refugees", in order to erect barriers, gates, floodgates, which act as unilaterally permeable membranes: fluid only for the included, the privileged, sealed against poor immigrants. This flood of refugees, these "impoverished, superfluous" people, are viewed as messengers of doom, *memento mori*, heralds of the *vanitas* and fluid transience of the West's once rigid regimes of power and domination (Agier, 2008).

### 3. The fluidity and pedagogy of seeing

*I am learning to see. I don't know why it is, but everything enters me more deeply and doesn't stop where it once used to. I have an interior that I never knew of. Everything passes into it now. I don't know what happens there. (Rilke, 1990, p. 5)*

*Thinking requires silence. It is an expedition into silence. (Han, 2013, p. 63, own translation)*

Precisely because fluid transitions in the sense of educational transformation processes and educational transitions have a dangerous element, we need containers as rites in learning and teaching processes, to ward off the danger of disintegration. Like migration, education processes involve leaving behind safe, familiar echo chambers, and repeatedly entering foreign terrain in teaching and learning transformation processes – with fluid phases of bewilderment and alienation. Seen in this light, phases of learning are moments of unpredictability, intractability and uncontrollability. The "intractability of the learning process is of crucial importance because resonance can only be created in a freely vibrating medium" (Beljan, 2017, p. 397, own translation). Rites are the means by which teaching and learning groups periodically reaffirm themselves (Durkheim, 2001, p. 287) – and their educational functions relate to both form and content. In processes of educational transfer, there is always a danger that knowledge previously considered to be secure may be dissolved; the same threat hangs over identities of knowledge and personal and social identities of consciousness that have developed up to that point (Van Gennep, 1960). At the same time, these threshold passages are to some extent liminal states, in which learners are in limbo. Only beforehand and afterwards are they part of a structure of knowledge; in between, their knowledge is confronted with the fear that it might dissolve in the transient, chaotic indeterminacy of not-yet-knowing. Educational "passengers" are therefore, like liminal entities, neither here nor there. They are neither one thing nor the other. They are situated in the watery no-man's-land between positions (Turner, 2017, p. 95; see also Turner, 1977). There are fluid moments of education in between and within and outside of time, which are therefore also characteristic of educational processes: it is these that contain phases of fluid transformations.

Education is therefore not a linear, accumulative process of educational growth for the securely stored knowledge of a capitalist and meritocratic knowledge society. Rather, knowledge itself involves knowing that one knows nothing, that learning is always in part embedded in a process of fluidity, of transience and forgetting. "Yet the capacity for contemplation need not be bound to imperishable Being. Especially whatever is floating, inconspicuous, or fleeting reveals itself only to deep, contemplative attention" (Han, 2015, p. 14).<sup>vii</sup> The gift for quietly listening to (or listening in on) fluid processes is therefore based on the capacity for contemplative, deeply relaxed attention, which is inaccessible to a hyperactive ego.<sup>viii</sup> "The general time pressure destroys the circuitous and the indirect. As a result, the world becomes poor in forms. Every form, every figure is a *detour*. Only naked formlessness is direct" (Han, 2014, p. 107, own translation). In contrast, a pedagogy of lin-

gering and pausing makes it possible to perceive and express fluid phenomena. "The floating, the inconspicuous or the fleeting are only revealed to a deep, contemplative attention", springing from that profound and creative boredom which the hyperactive capitalist world, intent on optimizing education, threatens to eradicate (ibid., 28, own translation; Stiegler, 2008, p. 113).

"Things have an internal equivalent in me; they arouse in me a carnal formula of their presence. Why shouldn't these equivalences in turn give rise to some tracing rendered visible again, in which the eyes of others could find an underlying motif to sustain their inspection of the world?" (Merleau-Ponty, 1993, p. 126). Pedagogical seeing as the perception of fluid elements in learning and teaching contexts could therefore correspond to the eye of the artist, since

We, forgetting the viscous, equivocal appearances, go through them straight to the things they present. The painter recaptures and converts into visible objects what would, without him, remain walled up in the separate life of each consciousness: the vibration of appearances which is the cradle of things (ibid., p. 68).

This places demands on educators: it turns out to be only on the surface that the foreign is the extra-ordinary, the thing that cannot be said, experienced, imagined or thought within an order, or which has no place within an order. The hard-to-express, fluid and ephemeral elements of education processes become clear to them when they apply ways of seeing that are capable of responding to distinctive features, individualities, peculiarities, discontinuities, contrasts and singularities in all their vitality. A pedagogical view of humanity which chooses the idea of the human machine (Bauer, 2018, p. 87)<sup>ix</sup> as its model in the educational context, for a mechanistic conception of the body and education, restricts their way of thinking about education to feasibility, control, power (over oneself and others), and the accumulation of knowledge. This concept of education leaves no room for fluidity; it stands for a mechanistic way of thinking about the world, which only acknowledges what can be unambiguously grasped and empirically documented: these educators will never flush out the antiform, or navigate through "the hollows of intervals" (Virilio, 2005, p. 31).

It is also the transitory, fluid movements of concepts and the fluid intervals between concepts that have to be discovered. What is needed here is a calm and contemplative approach on the part of educators. This does not call for fast-moving educational entertainment, or the constant agitation of PowerPoint presentations, which correspond to signal-and-response sequences in highly accelerated, media-saturated, capitalist mass societies. They would hover like *flâneurs* of education above the anonymous mass of the learning public, without being involved with their personality; their preferred environments would be the passages and corridors of universities, where they would be confronted with an oversupply of educational commodities, and the illusion of being able to pick and choose between them. And yet: "Empathy with the commodity is fundamentally empathy with exchange value itself. The flâneur is the virtuoso of this empathy. He takes the concept of marketability itself for a stroll. Just as his final ambit is the department store, his last incarnation is the sandwich-man" (Benjamin, 1999, p. 448).

Thus, fluidity can be experienced contemplatively by educators. For this they need to cultivate pedagogical seeing. They can then, in a constant process of reinterpretation and changing of perspective, immerse themselves and their understanding in the nature of fluidity. "Learning to *see*, as I understand it, is almost what is called in unphilosophical language 'strong will-power': the essence of it is precisely *not* to 'will', the *ability* to defer decision" (Nietzsche, 1990, p. 76), or, in other terms, the fluid, the flowing, the floating, the liquidness or the fluid effect or aura of an object or a person<sup>x</sup> in the learning and teaching context. Where is the boundary between a positively viewed dissolving of unilinear identities, and irrevocable obliteration, in the sense of the disintegration and disappearance of the subject? Is it possible to lose something that one no longer has or needs? For French post-structuralists of the 1960s and 1970s,<sup>xi</sup> this means that there are no longer any subjects, only accumulations of identities of various affiliations. What shifts have taken place since

then, in society as a whole? The return of the subject or its continued dissolution? And what implications does this have for pedagogical reflection?

The concern of pedagogical thinking can initially be not to think only in strictly formal terms, but to develop a dynamic openness in relation to content, making it possible to understand contradictions as existential components of a fluid pedagogical space which is always in motion. To understand that a contemplative attitude based on pausing and silently listening is the pedagogical prerequisite for perceiving fluidity in the educational context, and also for detecting one's own fear of the loss of self – which basically constitutes a loss of control in the teaching and learning context. To escape this loss of self, educators repress the uncontrollable, the unmanageable, the limitless and mysterious; they repress imponderables and fluidities or the forgetfulness of time – and thus the opportunity to experience what fluidity could mean in educational contexts. Without having to be constantly fixated on rational-instrumental self-preservation, educators would have much to gain if they could – as fluid border-crossers – temporarily suspend these arduous efforts to maintain boundaries and alienate the self. If rational pedagogical self-preservation is played off against irrational loss of self, then rationality as an ability of educators turns against itself and suppresses – for the sake of self-preservation – their natural experience of fluidity. Educators then unquestioningly subject themselves and learners only to dominant norms of rational, calculating pedagogical thought, because they are otherwise seen as confused, directionless, inconsistent, and ultimately irrational or insane if they actually cross fluid boundaries in the in-between (Lyotard, 1991).

The image of the liquid personality, living in in-between worlds and suffering from not being anchored, frightens us. This image could be expanded: whether educators or learners really suffer depends on how, as they undertake educational passages in teaching and learning situations, they jointly shape times of transition, "where space and time cross to produce complex figures of difference and identity, past and present, inside and outside, inclusion and exclusion" (Bhabha, 1994, p. 2), and learn to see the always existing becoming-fluid and being-fluid of our universe: "The waters symbolize the universal sum of virtualities; they are fons et origo, 'spring and origin', the reservoir of all the possibilities of existence; they precede every form and support every creation" (Eliade, 1959, p. 130).<sup>xii</sup> The cultural anthropologist Mircea Eliade evokes this fluid force, which educators can share if, in moments of extreme meditative attentiveness, they can temporarily lose their self-control and surrender to self-forgetfulness. Precisely because they see in a non-intentional manner in these moments, they see more – and *more deeply*. A positive flow develops in the teaching and learning context, which can inspire teachers and learners in a special way, empowering them to perform feats of creativity. Sometimes it is enough to slightly change one's position: these small border-crossings are the condition for exploring the fluid, and "those who perceive transparency know well that nothing is immobile, that everything is always moving" (Virilio, 2005, p. 26).

In *Du nomadisme: Vagabondages initiatiques*, Michel Maffesoli characterizes neotribalism as fleeting and fluid, scattered, temporary and sporadic in its associations, showing ambiguity and fragility in constantly changing configurations. Here too, fear and fascination are associated with the foreign, and serve to constitute an ambivalent relationship with this figure. It is *our* simultaneous curiosity and rejection which define it. Educators as subjects who recognize and understand their own contradictions can be the basis for recognizing their inner stranger, their ambivalent fluid identities. Because in reality, identity is neither something unbroken nor something coherent. Robert Hettlage, for example, speaks of an "ongoing self-projection [*Sich-Entwerfen*] into the world" (Hettlage, 1989, p. 415), and Vilém Flusser conceptualizes nomadic forms of society on the basis of digital media: humans are thrown into the world, not placed in it; it is in motion that they find themselves; in order to start moving they must "unsettle" themselves (*sich entsetzen*), be beside themselves (*außer sich sein*), and get up or stand up (*aus dem Sitz kommen*). This 'unsettling' as amazement and philosophizing is an ongoing intellectual movement (Flusser, 2003, pp. 26–27).<sup>xiii</sup>

Today the fluid, which Simmel associated with the foreign, stands for the increasingly fluid and confused, rapidly-moving constitution of *our* plural sociality, shaped by the constant compulsion to travel faster and faster (Maffesoli, 1997, p. 42). Increasingly, the nomadizing life in the global urban bustle affects us all: globally, we are being pushed into fluid capitalism (Maffesoli, 1992, p. 223; Flusser, 2003). Since these experiences of fluid communitization or fragmentation are relevant to education, it is essential to impart, in the context of teacher training, procedures of sensitive comprehension focused on the fluid experience and perception of education. Educators – *ad fontes!* Fluidity educates. If the contemporary diagnoses of fluid postmodernity are accurate, this has consequences for teaching and learning situations in educational institutions and/or for the relationships of those who work together there. It influences which personal experiences and modes of perception teachers and learners empathize with when they want to understand each other, and where the limits of the experienceable lie for the educational interactants. Empathy and fluidity are closely connected.

Today the increasingly fluid self is not only associated with the foreign, but to an ever-greater extent with everyone. Education (*Bildung*), understood as self-becoming and self-discovery, draws on this developmental process, when the self is formed (*bildet sich*) in interaction with fluid foreignness: fluidity as a component of fluid postmodernity and of the fluid self is a fundamental element of today's education. For the self that is forming or educating itself (*das Selbst, das sich bildet*) is unstable and impermanent. It is fluid and malleable and is forever appearing in new forms in the educational context. The insight of Heraclitus is still valid: "We step and do not step into the same rivers; we are and are not" (Heraclitus, 1987, p. 35). Constantly immersing ourselves in the perpetual stream of education, bearing in mind the aphorism of Heraclitus, allows us to imagine the fluidity of the self in a postmodern knowledge society which has become fluid. If "fluid intelligence" ("general fluid ability") is linked to the ability to solve new problems without acquired knowledge (Rost, 2013, p. 413),<sup>xiv</sup> then the foreign, which has something fluid about it, can be an appropriate stimulus for training abstract, deductive thinking and intellectual flexibility. Furthermore, a tolerance for ambiguity towards fluid foreignness also entails fluidity in oscillating, and in tolerating our own positional indeterminacy and thus our temporary or occasional lack of contours. Empathy towards the foreign includes fluidity in the liminal phase between that which is our own and that which is foreign. These contact zones of the "in-between" are new places of non-fixed changes of identity, between fluidity and crystallization: the two processes are in an interdependent relationship, like knowledge acquisition and knowledge loss, processes of remembering, forgetting and re-forming. Lethality should therefore always remind us – the mediators of knowledge – of the waters of the Lethe: those who drink them lose their memory in order to be reborn.<sup>xv</sup>

## References

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## Endnotes

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- i Postmodernity finds itself without orientation or stability in a field of vagueness and borderlessness: Bauman, 2000. Note that the original title of Bauman's book, *Liquid Modernity*, has been inadequately translated as *Flüchtige Moderne* for the German edition. "fluid" means liquid, flowing/fluent, modifiable, mobile, mutable, variable, variant, watery etc., while "flüchtig" means fugitive, hasty, quick, transient, ephemeral, volatile, etc., see *Digitales Wörterbuch der deutschen Sprache*.
- ii Populist movements can be interpreted as reactions to the fear of the dissolution of fixed societal structures.
- iii Debord, 1994, p. 15: "The spectacle is essentially tautological, for the simple reason that its means and ends are identical. It is the sun that never sets on the empire of modern passivity. It covers the entire globe, basking in the permanent warmth of its own glory."
- iv See also Tustin, 1986, p. 205: "[O]n his arduous journey back to his home base of Ithaca [...] Odysseus was often buffeted by storms and waves. Homer describes how as Odysseus lay exhausted on some forlorn island shore, his limbs were 'loosened' and his body 'ran like water'. He was threatened with dissolution and extinction."
- v This important insight consists in the differentiation between pure autism and what is known as "post-autistic" characteristics, which manifest in various ways in both child and adult pathologies, and can lead to a more or less severe inhibition or stagnation in psychological development.
- vi Bauman describes the changed relationship between time and space as the outstanding feature of fluid modernity (Bauman, 2000, p. 8).
- vii See also, in Han, 2014, p. 84, the term "tiefe Langeweile" ("profound boredom") for recognizing the fluid as, for example the "duftende Länge der Zeit" ("fragrant length of time").
- viii For the "art of deceleration" see Brüderlein, 2011.
- ix See also La Mettrie, who presents his views on religion, morality and law, and on the position and function of humans, in his work *L'Homme machine* (first published anonymously in 1747, post-dated 1748): "I am not mistaken; the human body is a clock but so huge and cleverly constructed that if the cog which tells the seconds happens to stop, the one which tells the minutes goes on turning, in the same way as the cog for the quarters continues to move, and so do the others, when the first ones are rusty or out of order for some reason and stop working" (La Mettrie, 1996, p. 34).
- x See "gender fluidity" as the constant renegotiation of one's sexuality, in order to renounce gender-specific orientations. In contrast to transgender people, no definitive transformation into the other sex is sought: the blurring/flowing aspect is often expressed in an androgynous look, which has both masculine and feminine characteristics; Bradley & Page, 2017, p. 583.
- xi See the idea of the subject as an illusion in Deleuze & Guattari, 2004; Deleuze, 1995.
- xii See *ibid.*, p. 131: "The waters cannot pass beyond the condition of the virtual, of germs and latencies. Everything that is form manifests itself above the waters, by detaching itself from the water."
- xiii Noteworthy in connection with fluidity is Flusser's image of virtuality. He evokes the following image for the concept of virtual space: "Imagine the ocean of possibilities. [...] This ocean of possibilities creates foaming waves, which reach up somewhere. The waves are trying, if you like, to become real; the possibilities are trying to be realized, they lean powerfully towards reality. The waves that come closest to this goal may be called 'virtual'" (Flusser, 1993, p. 65, own translation).
- xiv "Fluid intelligence" is characterized as follows: recognizing complex relationships; identifying sameness and difference between elements, relations, systems; drawing conclusions; logical problem-solving.
- xv The content of this article is based on the following text: "Fluidität und Bildung oder über das Fremde, dem etwas Fluides anhängt", in: Oberlechner, M. & Schneider-Reisinger, R. (Eds.). *Fluidität bildet: "Pädagogisches Fluid" – Fluidität in Bildungsprozessen*. Baden-Baden: Nomos (in press).

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Günter Graumann (Germany)

## Backgrounds and Goals of 'Innovations': The Examples of New Math in the 1960s and the Change from Input to Output 1995

**Abstract:** Every innovation should be questioned critically in the sense of humanization of education, in particular with regard to the context and overarching objectives for which an innovation is effective. That innovations are not always improvements will be shown on two international examples from the last six decades.

In the 1960s, triggered by the so-called Sputnik shock, an innovation was initiated by the OEEC (OECD). In the interests of the economy, the number of educated people in mathematics and science should be increased. In connection with this, the innovation known under "New Math" for teaching mathematics was born.

A further international innovation started in the mid-1990s stimulated by the results of the comparative OECD studies TIMSS (1997) and PISA (since 2000) which also focused on mathematics and science. This meant a change from input to output (final tests) and the change of the school system according to organizational forms of business management.

**Key words:** education as the third factor of the economy, New Math, change from input to output in the 1990s, business management at school, questioning the overarching goals of an innovation.

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**摘要** (Günter Graumann: “创新”的背景和目标：1960年代新数学的实例以及1995年从投入到产出的转变)：在人性化教育的意义当中，任何一项创新都应该被质疑，尤其是旨在影响创新环境及更高层次的目标方面。过去六十年中的两个国际案例表明创新并非总是进步这一事实。

在所谓的人造卫星的冲击下，经济合作与发展组织在1960年代发起了一项创新。为了经济的利益，应提高在数学和自然科学领域的受教人数。在这种情况下，诞生了被称为“新数学”的创新数学教育。另一项国际创新始于1990年代中期，受到经济合作与发展组织的比较研究，TIMSS (1997年)和PISA (自2000年)的结果的启发，二者同样侧重于数学和自然科学，以及从投入到产出的转变（最终测试）和根据企业治理的组织形式而导致的学校系统的改变。

**关键词：**教育作为第三经济因素，新数学，在1990年代从投入到产出的转变，学校的公司治理，一项创新的更高层次的目标的质疑。

**摘要** (Günter Graumann: “创新”的背景和目标：1960年代新数学的实例以及1995年从投入到产出的转变)：在人性化教育的意义当中，任何一项创新都应该被质疑，尤其是旨在影响创新环境及更高层次的目标方面。过去六十年中的两个国际案例表明创新并非总是进步这一事实。

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**Zusammenfassung** (Günter Graumann: Hintergründe und Ziele von ‚Innovationen‘: Die Beispiele der New Math in den 1960er Jahren und der Wechsel von Input zu Output 1995): Jede Innovation sollte im Sinne einer Humanisierung der Bildung kritisch hinterfragt werden, insbesondere im Hinblick auf den Kontext und die übergeordneten Ziele, für die eine Innovation wirksam sein soll. Dass Innovationen nicht immer Verbesserungen sind, soll an zwei internationalen Beispielen der letzten sechs Jahrzehnte verdeutlicht werden.

Ausgelöst durch den sogenannten Sputnik-Schock wurde eine Innovation von der OEEC (OECD) in den 1960er Jahren initiiert. Im Interesse der Wirtschaft sollte die Zahl der in Mathematik und Naturwissenschaften ausgebildeten Personen erhöht werden. In diesem Zusammenhang wurde die unter "New Math" bekannte Innovation für den Mathematikunterricht geboren. Eine weitere internationale Innovation setzte Mitte der 1990er Jahre ein und wurde durch die Ergebnisse der vergleichenden OECD-Studien TIMMS (1997) und PISA (seit 2000) angeregt, die ebenfalls auf Mathematik und Naturwissenschaften fokussieren und einen Wechsel von Input zu Output (Abschlusstests) und die Änderung des Schulsystems entsprechend den Organisationsformen der Unternehmensführung zur Folge hatte.

**Schlüsselwörter:** Bildung als dritter Wirtschaftsfaktor, New Math, Veränderung von Input zu Output in den 1990er Jahren, Unternehmensführung in der Schule, Infragestellung der übergeordneten Ziele einer Innovation.

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**Аннотация** (Гюнтер Грауманн: Предпосылки и цели «инноваций»: примеры внедрения «новой математики» в шестидесятые годы двадцатого века и операционализации знаний по модели «ввод- вывод»): Концепция гуманизации образования предполагает, что любая инновация должна быть подвергнута критическому рассмотрению, особенно в отношении контекста ее применения и общих целей, в реализации которых и должна помочь инновация. То, что инновации не всегда связаны с улучшениями, наглядно демонстрируют два примера из международной практики, реализованные за последние шестьдесят лет. Запуск советского спутника вызвал шок во всем мире и послужил поводом для «запуска» инноваций со стороны организации экономического сотрудничества и развития. В интересах экономики необходимо было увеличить количество подготовленных специалистов в области математики и естественных наук. Для этих целей была провозглашена инновация под обучение математике, которая получила название «новая математика» (New Math). Другая инновация пришла на середину девяностых годов двадцатого столетия. Ее «спровоцировали» результаты сравнительных мониторинговых исследований (в 1997 году – TIMMS, начиная с 2000 г. – PISA), инициированных организацией экономического сотрудничества и развития: Эти мониторинги были направлены на «измерение» качества школьного математического и естественнонаучного образования. Они привели к смене дидактической парадигмы (с опорой на принцип выводного знания, использования итоговых тестов) и изменения в системе школьного образования, при которой формы организации занятий должны были копировать принципы управления предприятием.

**Ключевые слова:** образование как третий экономический фактор, новая математика, переход от системы «входа» к принципу выводного знания, внедрение в школьную практику принципов управления предприятием, критическая рефлексия над глобальными целями инноваций.

## Introduction

Innovations in education make an important contribution to the development of education. However, it should always be critically questioned in which direction innovation steers the development and what interest is pursued.

Arthur K. Ellis has provided theoretical foundations for the term "innovations in education", its structures and developments. In a summary of his research on the benefits of innovation, he writes:

In some instances the evidence is supportive. In others this is not so much the case, especially where shaky theoretical foundations are concerned, few or dubious studies have been conducted, and program evaluation studies are lacking (Ellis, 2005, p. 202).

Elsewhere, he points out that "we have been conditioned by advertisers and promoters to associate 'new' with 'improved', whether the product is a laundry soap or a school curriculum" (Ellis, 2015, p. 6 [PDF Download version; see also: Ellis & Bond, 2016]). To discuss these aspects further, two international top-down innovations will be presented that were pushed by the economy and served less the goals of humanizing education than more political and economic interests.

## 1. New Math and opening the education system between 1957 and 1972

As part of the trial of strength between the US and USSR on October 4, 1957, the Soviet Union first brought a satellite (Sputnik) into space and thus triggered in the Western world the so-called Sputnik shock. The demand for more and better technical innovations was the result. In the years 1958 to 1961, therefore, the OEEC (Organization for European Economic Co-operation) - the predecessor organization of the OECD (Organization for Economic Cooperation and Development) - stimulated several seminars aimed at improving the teaching of mathematical and scientific subjects and methods. The OECD report on these seminars in 1961 stated amongst others, that the higher economic growth rate is leading to an increased demand for skilled workers who can only be trained in schools. Education is not so much understood as the education of the human being for personality, but education is regarded as an essential, if not decisive, production factor (third factor) in addition to conventional expenditure on labor and capital, which makes economic growth to the required extent possible in the first place (OECD, 1961, p. IV).

At the instigation of this call and the changes in the subject of mathematics, the innovation wave known as "New Math" was developed. An important role was played by Zoltan P. Dienes, secretary of the International Study Group for Mathematics Learning (Sherbrooke, Canada) and an expert in mathematics at UNESCO. In his 1960 book "Building up Mathematics", Dienes still pointed to the improvement of the pedagogical situation in mathematics lessons, but in his 1967 book "Approach to modern mathematics", he first emphasized the "need for reform due to economic changes" and under the heading "Which New Kind of Mathematics" he wrote that great demand for other branches of mathematics will exist if industry needs are to be met. For example, the binary system becomes indispensable in arithmetic, because only the binary system can be used satisfactorily for programming in computer language. (Dienes, 1967, p. 17). He also advocated the use of the set-of-speech (i.e. "set-terms", "subsets", "intersection of set" and "union of sets") already from the first school year. About his concept he published a series of books - also with school practical suggestions - and traveled throughout the Western world to promote his ideas.

A related innovation with formal mathematical speech and presentation then was introduced in all western states. In Germany e.g. since 1965, individual experiments have been taken place and in October 1968 the KMK (Conference of the Ministers of Culture of the German Länder) made the decision that from 1972 throughout the Federal Republic the "New Math" is to be taught. In addition to the reference to the "changed way of thinking" in mathematics of the specialists and the reasons for this decision beside others it was put down: "Our economic growth depends on the availability of a sufficient number of mathematically, scientifically and technically well-educated people" (KMK, 1968, p. 1). [Note the expression "available people" - personality is not heard.]

At the same time - with reference to the "third factor of economics" - calls were made in Western Europe for a general opening of the education system. In Germany, the so-called "Picht-Speech" (Picht, 1964), which speaks of a possible coming educational catastrophe, is known for this. And in the OECD report mentioned above, in the foreword to the German edition of 1964 it is stated:

Today's economic and social conditions demand less from schools the education of an intellectual elite - which always exists - but rather an increase in the educational level of the

broad masses, whereat insight into the technical, economic and social structure of the modern world of work is necessary (OECD, 1964 [translated by G.G.]).

The result was the admission of more young people to secondary schools and the expansion of the higher education system. In addition, simplified scientific contents were included in primary schools and science-oriented teaching was propagated in pedagogy.

In the early 1970s - after several US astronauts had landed on the moon - the OECD believed that there were sufficient specialists available for technological developments in Western European countries, and especially in the US. For this reason, and also because of the resistance of large sections of the population against "New Math" (see e.g. Kline, 1973), the innovation associated with New Math was reversed and the opening of the education system was stopped by the end of the 1970s. Then in the 1980s, reform pedagogical concepts were used again in the didactics and pedagogy of the subject.

## 2. Output orientation and management principles in education since 1995

Starting in the mid-1990s, a new top-down innovation was introduced in Europe by the OECD. The background to this was again the reference to the third factor of economics, namely the educational level of most member states in reading, literacy, mathematics and science. The comparative studies TIMSS (Third International Mathematics and Science Study / since 2003 called: Trends in International Mathematics and Science Study) carried out by the OECD 1995 and the PISA studies (Program for International Student Assessment) from 2000 onwards showed differences, especially compared with Asian countries. In Germany in particular, the results of the TIMS-Study have been the subject of intense discussions among educators, but barely were noticed by the general public. However, apart from a few exceptions, it was the first performance review with standardized methods at the international level in which Germany participated. Some authors (e.g. Klieme & Baumert, 2001) noted that

Education policy and the public in Germany have insufficient information on the framework conditions, process characteristics and effects of the education system at supra-regional and national level. To date, there has been no regular investigation and statistical analysis of the effectiveness of our education system. In the USA, however, in the Netherlands and now also in Great Britain and the Scandinavian countries, such a system of monitoring is firmly anchored. It serves educational policy and schools as a feedback and early warning system (ibid., p. 5 [translated from German by G.G.]).

And Röhner (2009) drew attention to the fact that

With the OECD's measure of international comparisons of school performance, national education systems will have to examine the extent to which children and young people are prepared for the challenges of the knowledge society by means of international comparisons. The driving force behind this development is not exclusively a pedagogical one, but increasingly also an economic one, which wants to ensure the international competitiveness of states and communities (ibid., p. 11 [translated from German by G.G.]).

In contrast to TIMSS, the PISA study received much more attention. Some of the features of PISA are very different from previous school performance like assessments to accumulation of knowledge, special ability training and so-called competences "relevant to personal, social and economic well-being". As stated 1999 by the OECD its contractual task is policy advice and PISA should not only provide a description of the actual state, but also trigger improvements. To the extent that PISA is

based on its own educational concept, it at least implicitly claims to have a retroactive effect on national curricula (PISA-Studien, 2019).

In Germany, curricula have been changed since 2003 to focus on the acquisition of competences. The entire pedagogical discussion changed because the focus was no longer on "input" (pedagogical objectives and methodological considerations) but on "output" (final test at various levels), which also created a competitive mindset between different schools. In the process, school management was induced to adopt organizational forms of corporate governance. Instruction was often shortened to the preparation of the tests, leaving only content and competencies to be considered through written tests.

All in all, an empirical turn in pedagogy away from a rather humanistic orientation towards empirical research with comparative studies and final examinations took place as a focus. However, due to educational tendencies oriented towards business thinking and comparative and output tests, such a concept is considerably reduced and stunted to learning only testable knowledge, skills and abilities - a bad traditional teaching in a new one garb. In addition, publicly funded research has recently been followed this test trend to a considerable extent. That for other research directions and fundings often no money is available. A report by G. Lind e.g. on the results of the 2002 'no-child-left-behind' law in the US does show this (Graumann, 2009, p. 65 f.).

### 3. Concluding remark

If we now assess this still prevailing trend from a pedagogical point of view, we can conclude, as we did in the innovation of the 1960s that despite some positive results (e.g. the suggestion to reflect on learning goals), the aspect of humanizing education has been lost sight of. It should not be denied that young people also have to acquire knowledge and skills relevant to everyday life and work, but the individual development of personality and the promotion of general cultural knowledge and skills as well as especially democratic attitudes should not be lost.

Through bottom-up innovations, a turn towards the humanization of education must be initiated. Whether the recent proposals to digitize the teaching can help in this is very questionable. In any case, every innovation has to be critically examined in terms of its background and what goals are achieved or supported.

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YaRu Zhou (USA)

# Collective Teacher Efficacy: An Introduction to Its Theoretical Constructs, Impact, and Formation

**Abstract:** Collective teacher efficacy has been introduced as the number one impact on students' achievement by John Hattie and has drawn increasing attention from educational researchers. This study presents the theoretical background of collective teacher efficacy and some empirical findings of this new number one visible learning factor. The paper also explores current results and discussions around the sources and formation of collective efficacy. At last, the author provides implications in where further research is needed, including the theoretical construction, empirical studies from an organizational perspective, and cross-culture comparative.

**Keywords:** Collective Teacher Efficacy, Theoretical Background, Empirical Studies

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**摘要** (YaRu Zhou: 集体教师效能：理论建构，影响以及形成的一项简介): John Hattie 将集体教师的效能作为对学生成绩的首要影响，并引起了教育研究者越来越多的关注。这项研究提供了集体教师效能的理论背景，以及这一新的第一可见的学习因素的一些实验性的发现。本文还探讨了当前的一些结果，以及围绕集体功效的来源和形成而进行的一些讨论。最后，作者在需要进一步研究的地方提出了一些建议，包括理论构建，从组织角度出发的实证研究以及跨文化比较。

**关键词：**集体教师效能，理论背景，实证研究

**摘要** (YaRu Zhou: 集体教师效能：理论建构，影响以及形成的一项简介) : John

Hattie 將集體教師的效能作為對學生成績的首要影響，並引起了教育研究者越來越多的關注。這項研究提供了集體教師效能的理論背景，以及這一新的第一可見的學習因素的一些實驗性的發現。本文還探討了當前的一些結果，以及圍繞集體功效的來源和形成而進行的一些討論。最後，作者在需要進一步研究的地方提出了一些建議，包括理論構建，從組織角度出發的實證研究以及跨文化比較。

**關鍵詞：**集體教師效能，理論背景，實證研究

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**Zusammenfassung** (YaRu Zhou: Kollektive Effizienz der Lehrenden: Eine Einführung in theoretische Konstrukte, Auswirkungen und Formierungen): Die kollektive Wirksamkeit von Lehrenden wurde von John Hattie als wichtigste Auswirkung auf die Leistung der Schüler eingeführt und hat die Aufmerksamkeit der Bildungsforscher auf sich gezogen. Diese Studie stellt den theoretischen Hintergrund der kollektiven Wirksamkeit der Lehrkräfte und einige empirische Erkenntnisse über diesen neuen sichtbaren Lernfaktor Nummer eins vor. Das Papier untersucht auch aktuelle Ergebnisse und Diskussionen über die Quellen und die Bildung kollektiver Wirksamkeit. Schließlich gibt die Autorin Hinweise darauf, wo weiterer Forschungsbedarf besteht, einschließlich theoretischer Konstruktionen, empirischer Studien aus organisatorischer Sicht und im interkulturellen Vergleich.

**Schlüsselwörter:** Kollektive Lehrereffizienz, theoretischer Hintergrund, empirische Studien

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**Аннотация** (Я-Ру Джоу: Коллективная эффективность учителей: теоретический аспект, последствие и перспективы): Термин «коллективная эффективность учителей» был введен Джоном Хэтти; рассматривалась эта модель обучения как важнейший фактор, влияющий на его результат; данная концепция сразу привлекла к себе внимание ученых, занимающихся изучением образовательного дискурса. В данной статье рассматриваются теоретические предпосылки

*возникновения концепции коллективной эффективности учителей; представлены также результаты эмпирических исследований, направленных на выявление роли этого нового обучающего фактора. Анализируются актуальные данные и научные дискуссии относительно источников «производства» коллективной эффективности. В заключительной части работы автор указывает на перспективы дальнейшего исследования данной проблематики, охватывая теоретические направления, эмпирические исследования через т. н. «организаторскую» перспективу, а также сопоставительный анализ в контексте диалога культур.*

**Ключевые слова:** коллективная эффективность учителей, теоретические предпосылки, эмпирические исследования

## Positive consequences of Collective Teacher Efficacy

“Collective teacher efficacy is the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students” (Goddard, Hoy, & Hoy, 2000, p. 480). At the Collaborative Impact Conference 2017, the author of Visible Learning, John Hattie, and his team presented collective teacher efficacy as the “new number one influenced” on student achievement, with an outstanding effect size of  $d = 1.57$  (Waack, 2018). Hattie’s conclusion is based on Rachel Jean Eells’ Meta-Analysis of the Relationship Between Collective Teacher Efficacy and Student Achievement (2011). Even though collective teacher efficacy is a relatively new topic in the educational research field, it has been drawing considerable attention from researchers due to increasing positive and significant empirical research findings.

In 2001, Goddard published his findings of a significantly positive correlation between collective efficacy and between-school differences in student achievement in “Collective Efficacy: A Neglected Construct in the Study of Schools and Student Achievement.” The study tried to “test the relation between collective efficacy and student achievement using longitudinal data that provided a control for students’ past achievement” (p. 467). The research involved 47 elementary schools from one large urban Midwestern school district. A total of 452 K-G5 teachers completed the collective efficacy survey, which is a 21 Likert-type items scaled from 1 (strongly disagree) to 6 (strongly agree). Student personal data, e.g. gender, race, SES, and longitudinal student achievement data were provided by the school district. The results showed that, in the full multilevel model, 26.6% of the variance in students’ mathematics achievement and 19.5% of reading achievement occurred between schools were explained by collective efficacy (Goddard, 2001, p 473).

Tschannen-Moran & Barr (2004) examined 66 middle schools in the Commonwealth of Virginia investigating the relation between students’ learning outcomes and collective teacher efficacy independent of SES. The Collective Teacher Belief Scale was used to measure the construct of collective teacher efficacy. Students’ achievement in math, writing, and reading/literature/research were measured by the Virginia Standards of Learning (SOL) Tests. Significant positive relationships were revealed between teacher perceived collective efficacy and student achievement in eighth-grade math ( $r = .41, p < .01$ ), writing ( $r = .50, p < .01$ ), and English ( $r = .37, p < .01$ ). The findings also showed that collective teacher efficacy made an independent contribution to explaining the variance in student achievement in writing independent of SES, but not in Math or English, which might due to the strong correlation with SES ( $r = .81, p < .01$ ) that “leave little systematic variance for collective teacher efficacy to explain” (p. 204).

In the empirical research published in 2004, Goddard and his colleagues collected data from 96 high schools in a large midwestern state to examine the correlation between collective teacher efficacy and the learning outcomes of students in grade twelve. “Averaged across content areas, the results suggest that a 1-SD increase in collective efficacy is associated with a gain of about 0.25 SD in terms of the num-

ber of students who pass high-stakes assessments in 12th grade” (Goddard, Logerfo, & Hoy, 2004, p. 420).

Eells (2011) analyzed twenty-six studies published from 1994 to 2010 investigating collective teacher efficacy in her meta-analysis. All twenty-six studies reported Pearson Product-moment correlation between collective teacher efficacy and student achievement. Many of them studied focused on the correlation, some of them also analyzed other variables, a few only reported Pearson's  $r$  as Descriptives. Sixteen of these studies were conducted at the elementary school level, two at the middle school level, and six in high schools. Two studies included all grade levels. All schools that participated were public schools, except a Nigeria study which involved both public and private schools. In all twenty-six studies, collective teacher efficacy was measured by self-report Likert scale surveys. The measurement of achievement, in all cases, was state-mandated standardized assessments that obtained from the education department.

Eells concluded that “the meta-analyses conducted for this sample demonstrate a strong positive effect size for the relationship between CTE and achievement. As collective teacher efficacy increases in a school, so does achievement. This holds true for all subject areas measured, and regardless of timing of measurement (p. 109). The effect sizes for this relationship varied from 0.537 to 0.628. The largest effect size was found for CTE and reading achievement and the lowest was for CTE and social studies achievement” (p. 111).

Ramos et al.'s literature review (2014) came to a similar conclusion. Ramos and colleagues reviewed thirty English and Portuguese articles about collective teacher efficacy published between 2000 and 2013. Twelve of the articles aimed to examine the correlation between collective teacher efficacy and students' performance, and all twelve studies found a positive correlation between them.

Improvement of students' performance is not the only fruit a team with high collective teacher efficacy can bear. Empirical research has found a number of productive behaviors associated with collective efficacy, including more in-depth implementation of school improvement plans, increased teacher leadership, receptiveness to new ideas, and a greater sense of efficacy to parents. In addition, teachers who perceive a strong sense of collective efficacy exhibit a positive attitude toward professional development, higher job satisfaction, and commitment to the teaching profession, less stress or burnout. They are more willing to take risks and to overcome challenges to meet students' needs. Studies also revealed that, in schools with high collective efficacy, students were more likely to be engaged emotionally, and fewer students were excluded due to behavior issues. Finally, collective teacher efficacy is positively related to teacher self-efficacy (Donohoo, 2018).

The positive findings of empirical research are overwhelming, but what is collective teacher efficacy? More importantly, how to create and maintain teachers' collective efficacy? These questions are addressed in the following sessions.

## Theoretical Background

The concept of collective efficacy was introduced by Bandura in the 1990s as “a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments” (1997, p. 477), which is rooted deeply in Bandura's social cognitive theory and his concept of self-efficacy.

## *Social cognitive theory*

Social cognitive theory believes that people are capable agentic operators who exercise influence over what they do and contribute to what happens to them. The human agency operates within an interdependent causal structure involving triadic reciprocal causation shown in Figure 1 below (Bandura, 1986a).

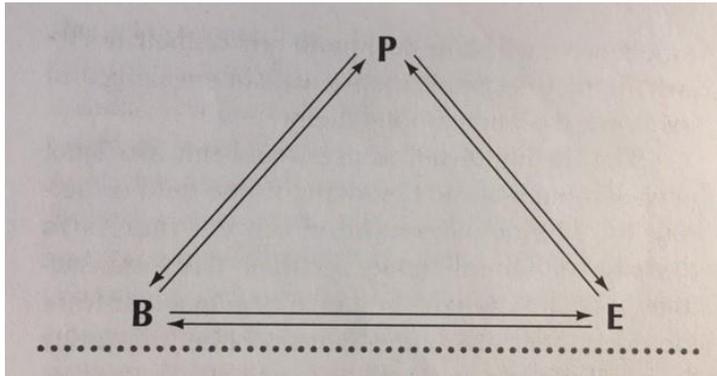
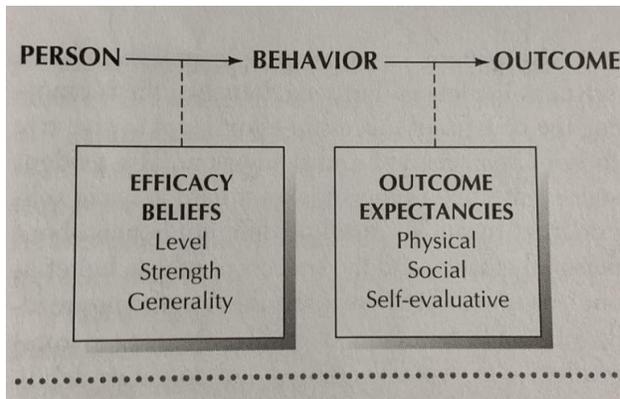


Figure 1. The relationship between the three major classes of determinants in triadic reciprocal causation.

B stands for behavior; P the internal personal factors in the form of cognitive, affective, and biological events; and E the external environment. (Bandura, 1986) Although, the interaction and influence of these three major classes of determinants vary for different activities, under different circumstances, and at different paces, they have a crucial impact on what we believe about ourselves, the choices we make and the actions we take.

## *Self-efficacy and collective efficacy*

Self-efficacy is the core concept of Bandura's social cognitive theory. In his book, *Self-Efficacy: The Exercise of Control*, he defined it as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). Efficacy expectations are distinctive from response-outcome expectations (Bandura, 1977, p.193). Perceived self-efficacy influences behavior choices. People try to avoid dangerous activities and conditions which they believe exceed their capacity and participate assuredly in the ones of which they believe they are capable. Perceived self-efficacy also determines the coping efforts, how much effort to put in and how long to persist, when people encounter difficulties and intimidating situations. People's thought patterns and emotional reactions are also influenced by perceived self-efficacy (Bandura, 1986, p.393, 394). Bandura pointed out that "psychological theories postulating that expectations influence actions focused almost exclusively on outcome expectations (1997, P. 19). Outcome expectations, which can provide incentives and disincentives for a given behavior, depend highly on people's judgement of how well they will be able to perform in a given task. The relationship between efficacy expectations and outcome expectations is illustrated in Figure 2 (Bandura, 1986, 1997).



*Figure 2. The conditional relationships between efficacy beliefs and outcome expectancies. In given domains of functioning, efficacy beliefs vary in level, strength, and generality. The outcomes that flow from a given course of action can take the form of positive or negative physical, social, and self-evaluation effects (Bandura, 1997, p. 22)*

People do not live in isolation but depend on each other to produce certain desired results. The growing interdependence of modern society underlines the pressing need to study collective action designed to shape the course of events. Therefore, besides individual self-efficacy, Bandura also presented collective efficacy which is the group members' shared beliefs in the group's operative capabilities. Bandura believes that the interactive and dynamics of the members produce the functioning of an organization. Therefore, collective efficacy is more than the sum of the individual attributes (Bandura, 1997).

Bandura postulated four sources of self-efficacy: enactive mastery experience, vicarious experience, verbal persuasion, and physiological and affective states. Enactive mastery is the most powerful since it is based on personal mastery experiences. Successful performances raise efficacy beliefs whereas repeated failures lower them. However, the effect of failure will reduce if it occurs after strong efficacy expectations developed through repeated success. Vicarious experiences happen when people observe others modeling the skill in question. Its effects on self-efficacy depend on the degree to which the observer identifies with the model; close identification leads to a substantial impact on efficacy and vice versa. Social persuasion is widely used for its availability but providing social persuasion alone may have limited influence on self-efficacy. However, if people are persuaded to take actions or work harder on the given task, this social persuasion experience can contribute to successful performances that create enduring increases in self-efficacy. Modifications of physiological and affective states, such as enhanced physical states, reduced stress levels, and negative emotional proclivities, and so on, is the fourth significant way of altering efficacy beliefs (Bandura, 1977, 1997).

### *Teacher efficacy*

Teacher efficacy is "teachers' belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (Guskey & Passaro, 1994, p.4). Bandura identified teacher efficacy as a type of self-efficacy. However, there is another conceptual strand for teacher efficacy.

Teacher efficacy was first defined by RAND researchers as "the extent to which the teacher believes he or she can affect student performance" (McLaughlin & Marsh, 1978, p. 84). In 1976, RAND researchers put two items in a questionnaire for a study examining the efficiency of certain reading interventions

and programs and found that “teacher efficacy, determined by summing scores on the two items listed below, was strongly related to variations in reading achievement among minority students” (Tschannen-Moran, 1998, p. 204). RAND Item I: “When it comes right down to it, a teacher really can’t do much because most of a student’s motivation and performance depends on his or her home environment.” RAND Item II: “If I really try hard, I can get through to even the most difficult or unmotivated students.” Since Item I measures beyond individual capabilities of a particular teacher, later it was labeled as General Teaching Efficacy (GTE), and Item II was labeled as Personal Teaching Efficacy (PTE) because it is more specific and individual (Tschannen-Moran, 1998).

RAND researchers stated that the two items were inspired by Rotter’s paper Generalized Expectation for Internal versus External Control of Reinforcement (1966). The key theory of this paper is called locus of control. Rotter proposed that the control of reinforcement lays either in the internal factors, such as a person’s behaviors, or external environment factors. Students’ achievement and motivation have been considered as an essential reinforcement for teachers’ behaviors. According to the locus of control, “teachers who believe that they could influence student achievement and motivation assume that they could control the reinforcement of their actions, thus have higher efficacy” (Goddard, Hoy & Hoy, 2000, p. 481).

The two different but interweaving conceptual strands have caused considerable confusion, and a lack of clarity of conceptualization adverse to theory construction and jeopardizes the reliability of the instruments, which will be further addressed in the later section of this paper.

### *Two Dimensions*

Two dimensions or factors have consistently appeared in factor analyses of the scales commonly used in the measurement of teacher self-efficacy regardless of the concept roots. There is a consensus on the first dimension, commonly called Personal Teaching Efficacy. However, there has been disagreement and debates arisen regarding the meaning of the second dimension, which is often called General Teaching Efficacy. Some researchers believe that it should be called “external influence” which represents Rotter’s construct of external control, while others argue that it is an outcome expectancy, the second element of Bandura’s self-efficacy theory (Tschannen-Moran, Hoy & Hoy, 1998).

Gibson and Dembo (1984) tried to apply Bandura’s two-component model of self-efficacy to define the two factors of teacher efficacy: “outcome expectancy would essentially reflect the degree to which teachers believed the environment could be controlled (General Teaching Efficacy, GTE), that is, the extent to which students can be taught given such factors as family background, IQ, and school conditions. Self-efficacy beliefs would indicate teachers’ evaluation of their abilities to bring about positive student change (Personal Teaching Efficacy, PTE)” (p. 570).

However, in 1994 Guskey & Passaro conducted a study to “examine the structure of a construct generally labeled teacher efficacy” (p.627), which was measured using an altered form of the Gibson & Dembo Teacher Efficacy Scale from 342 prospective and experienced teachers, and revealed that “teachers’ perceptions of their personal influence on student learning are not solely based on, nor strongly related to, their perceptions of the influence of external environmental conditions. The personal versus teaching efficacy distinction does not appear to hold” (p. 639,640).

On the foundation of previous research, Tschannen-Moran, Woolfolk Hoy, & Hoy proposed an Integrated Model in their paper, Teacher Efficacy: Its Meaning and Measure in 1998. This model interweaved

the major theoretical influences on teacher efficacy research and suggested new areas for research (see Figure 3).

*Tschannen-Moran, Woolfolk Hoy, and Hoy*

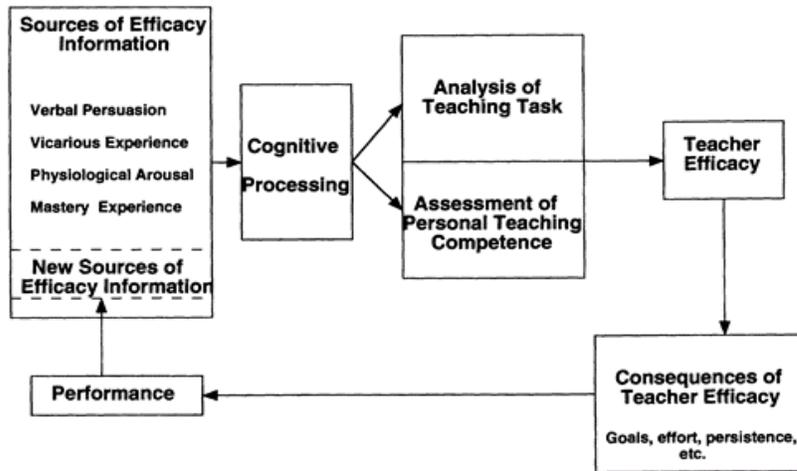


Figure 3. The cyclical nature of teacher efficacy (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998)

Tschannen-Moran, Woolfolk Hoy, & Hoy (1998) agreed that the attributional analysis and interpretation of Bandura's four sources of information are the main influences on teacher efficacy. Meanwhile, they argued that analyzing the teaching task and its context is necessary when making judgments of one's strengths and weakness since teacher efficacy is context specific. Teachers may feel competent teaching a particular subject than the other or teaching some students than the others.

According to Tschanne-Moran, two dimensions in this model are related to (but not identical with) the two factors, GTE and PTE. "In analyzing the teaching task and its context, the relative importance of factors that make teaching difficult or act as constraints is weighed against an assessment of the resources available that facilitate learning. In assessing self-perceptions of teaching competence, the teacher evaluates personal capabilities such as skills, knowledge, strategies, or personality traits balanced against personal weaknesses or liabilities in this particular teaching context." (p. 228).

## Collective teacher efficacy and a model of its formation, influence, and change

Collective teacher efficacy is an extension of individual teacher efficacy (Tschannen-Moran, Hoy, & Hoy, 1998). Goddard and his colleagues defined it as "the perception of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (2000, p. 503).

Bandura believed that "perceived personal and collective efficacy differ in the unit of the agency, but in both forms, efficacy beliefs have similar sources, serve similar functions, and operate through similar processes" (1997, p. 478). Developed from this notion, Goddard, Hoy & Hoy (2000) extended self-efficacy theory to the collective level by applying the assumptions of social cognitive theory to the or-

ganization level (p. 483) and build a model of collective teacher efficacy based on Tschannen-Moran et al.' Integrated Model of Teacher Efficacy (see Figure 4).

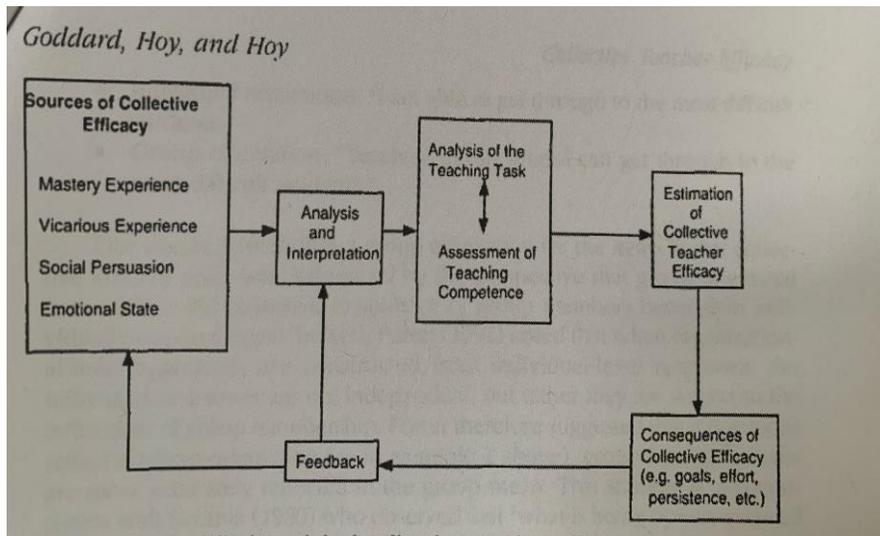


Figure 4. A simplified model of collective teacher efficacy (Goddard, Hoy, & Hoy, 2000)

Goddard and his colleagues postulate that Bandura's four sources of self-efficacy -mastery experience, vicarious experience, social persuasion, and emotional arousal - are also fundamental for forming collective teacher efficacy (2000).

### *Mastery Experience*

Mastery experience is considered the most important source in forming collective efficacy (Bandura, 1997; Goddard, 2004). A critical mass of studies demonstrates the positive effect of experience on organization performance (Huber, 1991). Schools as an organization learn from their direct experience. Past successes of the school enhance the team's perceived collective efficacy, whereas failures tend to lower beliefs. Attributions are also a key element. For example, when success is attributed to the team's ability or effort, collective efficacy is strengthened, and if the failure is attributed to bad luck or the uncontrollable causes, the perceived collective efficacy may not be undermined. However, if successes are often and too easy, failure is more likely to produce discouragement (Goddard, Hoy & Hoy, 2004). Goddard et al believed that "a resilient sense of collective efficacy probably requires experience in overcoming difficulties through persistent effort" (2000, p. 484).

Goddard (2001) studied 47 elementary schools within one large urban midwestern school district, involving 452 teachers and 2,536 students. The findings show that mastery experience, which explained 80% of the variability in the study, is a significant positive predictor of differences among schools in collective efficacy. Moreover, "when mastery experience was considered, school-level SES and race were no longer statistically significant predictors of differences among schools in collective efficacy" (p. 474).

### *Vicarious Experience*

According to Huber, “organizations commonly attempt to learn about the strategies, administrative practices, and especially technologies of other organization” (1991, p. 96). It is not uncommon for schools to replicate successful educational programs or borrowing from other schools aiming to achieve similar success. Collective teacher efficacy may also be strengthened by learning from successful schools, particularly the ones sharing similar organization goals and/or facing similar opportunities and challenges. However, it is prudent to point out that the research on how organizations learn from vicarious experience has not been sufficiently developed. To better understand the impact of observational learning on collective efficacy, more studies are needed.

### *Social Persuasion*

Social persuasion is another approach of strengthening faculty’s beliefs that they have the capability to accomplish the goals established. Staff meetings, professional development opportunities, workshops, and talks in teachers’ lounge could all serve to inspire actions. Though acting alone, social persuasion may not generate profound organizational changes, combined with positive direct or vicarious experience, it is likely to serve as a powerful influence on shaping a group’s collective beliefs. Social persuasion is a means of conceiving ongoing organizational socialization. Organizations are filled with social exchanges that communicate expectations, rewards, and sanctions. New teachers in schools with high collective beliefs quickly learn the high expectation for collective actions and performances from intercourses with other teachers and administrators. Collective teacher efficacy as an essential aspect of the organizational socialization and school culture creates a normative press that encourages the team to pursue excellence and overcome challenging obstacles (Goddard, Hoy & Hoy, 2000; 2004).

### *Affective States*

Just as individual efficacy is susceptible to anxiety or excitement, organizations react to stress also. According to Goddard et al, “affective states may influence how organizations interpret and react to the myriad challenges they face” (2004, p.6). Schools, possessed by a strong belief in group capability, intend to rise to the challenge and have a high tolerance to pressure and crises. In contrast, less efficacious schools tend to overreact or react dysfunctionally when confronted with disruptive forces.

It is important to notice that, though the theory is plausible, there is little research on how social persuasion or affective states impact collective efficacy beliefs and group performances. More research, especially empirical studies, are needed in this area.

While as all four sources of information are critical in conceiving collective efficacy, cognitive processing and interpretation of the information are also pivotal. Bandura pointed out that “changes in perceived efficacy result from cognitive processing of the diagnostic information that performances convey about capability rather than the performances per se” (1997, p. 81).

### *Analysis of the teaching task*

Goddard, Hoy, & Hoy call the process of teachers assessing what will be required as they engage in teaching as the analysis of the teaching task. “Factors that characterize the task include the abilities and motivations of students, the availability of instructional materials, the presence of community resources and constraints, and the appropriateness of the school’s physical facilities” (2000, p. 485). In a

word, teachers analyze what contribute to successful teaching, the challenges and barriers faced, and resources available to overcome the limitations and achieve excellence.

### *Assessment of teaching competence*

Teachers analyze the team's teaching competency, including teaching skills, methods, training, and expertise, in conjunction with their examination of the teaching task. "Judgements of teaching competence might also include positive faculty beliefs in the ability of all children in their school to succeed" (Goddard, Hoy, & Hoy, 2000, p. 485).

### Formation of collective teacher efficacy at schools

The Goddard, Hoy, & Hoy's model of Collective Teacher Efficacy was commonly accepted by the field. However, there are still many questions to be answered regarding how collective teacher efficacy is formed at schools. Goddard and his colleagues proposed that to foster collective efficacy, schools need to provide "practices that enable group members to exert influence and exercise organizational agency" (p.10). For example, they found that "after adjusting for school context, a .41 standard deviation increase in the extent to which teachers reported exerting influence over instructional relevant school decisions was positively associated with a one standard deviation increase in perceived collective efficacy" (p.10). When teachers were able to exert an influence on important school decisions, they tend to have a strong sense of collective efficacy. Bandura (1997) refers to such practices as "group enablement" and observes that "collective enablement programs take many different forms, but the shared assumption is that they work in part by enhancing people's sense of efficacy to bring about change in their lives" (p. 503).

Adams and Forsyth (2006) went further on this topic and proposed the enabling school system as a type of proximate source of collective teacher efficacy. According to Hoy and Sweetland, an enabling school system is "a structure that is formed by enabling formalization and centralization; the rules, regulations, and procedures are helpful and lead to problem-solving among members" (2000, p. 531). An enabling school system fosters trust among teachers and between teachers and the principal, encourages truth-telling, and limits role conflict. Hoy stated that "when school structure was enabling, teachers trust each other, demonstrate professional autonomy, are not bound by rigid rules, and do not feel powerlessness" (2003, p.91).

Adam and Forsyth (2006) refer to Bandura's four sources of efficacy as the remote sources and postulated contextual environment, including enabling school system, a proximate source of teacher perceived group efficacy. In their study, Adam and Forsyth examined a cross-section of 79 schools randomly drawn from 101 school districts in one quadrant of a Midwestern state to investigate the relationship between prior academic performance, enabling school structure, socioeconomic status, school level, and collective teacher efficacy. Goddard's 12-item collective teacher efficacy scale and Hoy and Sweetland 12-item Likert type scale were used to measure collective efficacy and the enabling school structure. 545 teachers returned usable instruments. The state department of education provided the data for school socioeconomic status, school level, and prior academic performance. Findings showed that consistent with previous research, prior academic performance ( $\beta = .46, p < .001$ ) accounted for the most variance in collective teacher efficacy. However, enabling school structure ( $\beta = .36, p < .001$ ), socioeconomic status ( $\beta = -.23, p < .001$ ), and school level ( $\beta = -.24, p < .001$ ) "independently explained a significant proportion of variance in collective teacher efficacy, with enabling school structure being the

most dominant” (p. 638). The study also revealed that “when enabling school structure, socioeconomic status, and school level were blocked and entered into the predictor set, the R-square increased from .54 to .74 ( $p < .001$ ). The combined effects of these three variables accounted for an additional 20 percent of the explained variance in collective teacher efficacy, over and above the explained effect of prior academic performance” (p.637). Could the contextual environment be a source of collective teacher efficacy?

The idea that teachers’ shared beliefs are shaped by external influences is not new. In 1986, Fuller and Izu evaluated factors that shape convergent beliefs among school staff from an organizational perspective. They examined data from 145 elementary and 39 secondary schools involved in California’s School Improvement Program and concluded that ideological convergence could be shaped by school managers and “the external sources of legitimacy and material resources on which the organization depends” (p. 527). Fuller and Izu’s findings are interesting and inspiring. Should educational researchers start to look at the formation of collective teacher efficacy from an organizational point of view and study it as an organizational behavior or a part of school culture?

## Further discussions

Besides the issues discussed above, there are more arguments about the sources of efficacy. In Cheung’s comparative study on Hong Kong and Shanghai primary in-service teachers’ perceived self-efficacy, Shanghai teachers identified three resources for their teaching efficacy: respect and confidence placed in them by students and parents, the training they received from universities and the experience they gained from daily teaching practice. Among these resources, only one (experience) directly related to Bandura’s sources of self-efficacy (2008). Moreover, many educators consider knowledge, including pedagogical, technological knowledge, and subject-matter knowledge, as a resource for their perceived efficacy (Morris et al., 2017). Buehl and Fives (2009) also explored the sources of teachers’ beliefs about their knowledge, and some of the sources did not align with Bandura’s four resources. As Morris stated, “it would be premature to conclude that all appraisals of teacher knowledge are derived from the sources of self-efficacy identified by Bandura” (2017, p.820).

In addition to the lack of understanding of the sources and formation of collective teacher efficacy, there is the measurement issue of collective efficacy. The most commonly used collective teacher efficacy measures are variations of Goddard et al.’s 21-item Collective Teacher Efficacy Scale or its revised 12-item short version. Goddard’s work has laid the foundation for collective efficacy research and made an outstanding contribution to the development of this research area. Nonetheless, Klassen et al. (2011) pointed out, in the literature review of teacher self- and collective efficacy research from 1998 to 2009, that some of the content of Goddard’s measures “displays a lack of congruence with theory” (p. 35). Several items were orientated toward external determinants, and others focused on teachers’ current abilities rather than on the “more theoretically congruent forward-looking capabilities” (p. 35).

The scale Somech and Drach-Zahavy (2000) used in their study included items that was incongruent with efficacy theory, such as “The teachers of this school have excellent job skills” and “Team teachers that can perform their jobs as well as this team are rare” (p. 653), which are also present focused. However, a few measures investigated in Klassen et al.’s review were more congruent with efficacy theory. For example, several studies used Tschannen-Moran and Barr’s (2004) collective efficacy scale, a 12-item scale focusing on teachers’ collective capabilities, e.g., “How much can teachers in your school do to produce meaningful student learning?” (p. 196), displaying a closer congruence to collective efficacy

theory. Measurement issues and congruence with established theory are a severe problem affecting collective efficacy research (Klassen et al., 2011). The illegitimacy of the teacher collective efficacy measurements cast a shadow on their results and might lead to inaccurate conclusions of the research.

## Conclusion

Collective teacher efficacy is a shared belief among teachers in a school or a department about their ability to impact positively on students' learning. A significant increase in research on collective teacher efficacy has been witnessed in American and international settings due to compelling empirical findings on its positive consequences, for example, higher students' achievement, increasing teachers' job satisfaction, and positive attitude toward professional development. In spite of the interests, little attention is paid to the theoretical construction.

First of all, more effort should be made in developing clear conceptualization and measures that are congruent with the theory. Furthermore, as Klassen and his colleagues said, we understand near to nothing about how collective efficacy forms at schools (2011). Further studies, particularly the ones with organizational perspective, are in need to paint a clear picture of the sources of collective teacher efficacy and how it forms in schools. Thirdly, teacher self-efficacy is subject and context specific, but with little research adopting qualitative or longitudinal approaches, there is only a modest understanding of how teachers' collective efficacy is influenced by context and how it changes over time. Finally, in Cheung's research, Shanghai teachers identified respect paid by students and parents as a factor that informed their perceived efficacy (2008). It is likely that a society's value on education plays a role in the formation of collective teacher efficacy. More cross-culture comparative research is needed to evaluate how collective teacher efficacy differ in cross-culture context.

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Ira Rasikawati (Indonesia)

## Corpus-Based Data-Driven Learning to Augment L2 Students' Vocabulary Repertoire

**Abstract:** *Corpus-based data-driven learning (DDL) is an inductive instructional approach using computer-generated concordances. It provides students with the opportunity to analyze different language forms across contexts found in the concordance output. The idea of engaging students to discover the language rules and patterns from authentic learning materials is central to the theory of inquiry-based learning. Despite the robust research support, however, DDL has not been widely adopted, in part because of a dearth of practical and specific recommendations for teachers. More studies are needed to corroborate the claim that the approach can promote the development of different language learning areas effectively. This article synthesizes relevant theories and research findings on the use of DDL for second language instruction and illuminates the understanding of how corpus-based vocabulary instructional strategies may work in English for Academic Purposes (EAP) courses in non-English speaking countries. The study recommendations include a corpus-based DDL framework to expand students' vocabulary and suggestions for future research*

**Keywords:** *EAP, second language, vocabulary, corpora, DDL, inquiry-based learning*

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**摘要** (Ira Rasikawati: 基于语料库的数据驱动学习, 以扩大二年级学生的词汇量): 基于语料库的数据驱动学习 (DDL) 是一种使用计算机生成的一致性的归纳式教学法。它为学生提供了在一致性输出中所发现的跨越上下文分析不同语言形式的机会。让学生从真实的学习材料中发现语言的规则和模式的这一想法是探究式学习理论的中心。尽管具有强大的研究支持, 但DDL尚未被广泛运用, 部分原因是由于缺少针对教师的实用性的及专业的建议。更多的研究需要来证实这种方法可以有效地促进不同语言学习领域的发展。本文综合了有关在第二语言教学中使用DDL的相关理论和研究成果, 并阐明了在基于语料库的词汇教学策略下, 在非英语国家的以学术英语 (EAP) 为目的的工作中如何发挥作用的理解。研究建议包含了一个基于语料库的DDL框架, 以扩展学生的词汇量和对未来研究的提议。

**关键词:** EAP, 第二语言, 词汇, 语料库, DDL, 探究式学习

**摘要** (Ira Rasikawati: 基於語料庫的數據驅動學習, 以擴大二年級學生的詞彙量): 基於語料庫的數據驅動學習 (DDL) 是一種使用計算機生成的一致性的歸納式教學法。它為學生提供了在一致性輸出中所發現的跨越上下文分析不同語言形式的機會。讓學生從真實的學習材料中發現語言的規則和模式的這一想法是探究式學習理論的中心。儘管具有強大的研究支持, 但DDL尚未被廣泛運用, 部分原因是由於缺少針對教師的實用性的及專業的建議。更多的研究需要來證實這種方法可以有效地促進不同語言學習領域的發展。本文綜合了有關在第二語言教學中使用DDL的相關理論和研究成果, 並闡明了在基於語料庫的詞彙教學策略下, 在非英語國家的以學術英語 (EAP) 為目的的工作中如何發揮作用的理解。研究建議包含了一個基於語料庫的DDL框架, 以擴展學生的詞彙量和對未來研究的提議。

**關鍵詞:** EAP, 第二語言, 詞彙, 語料庫, DDL, 探究式學習

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**Zusammenfassung** (Ira Rasikawati: Korpusbasiertes datengesteuertes Lernen zur Erweiterung des Wortschatzrepertoires der L2-Studierenden): Corpus-based Data Driven Learning (DDL) ist ein induktiver Lehransatz unter Verwendung computergenerierter Konkordanzen. Es bietet den Studenten die Möglichkeit, verschiedene Sprachformen kontextübergreifend zu analysieren, die in der Konkordanz-Ausgabe zu finden sind. Die Idee, die Schüler dazu anzuhalten, die Sprachregeln und -muster aus authentischen Lernmaterialien zu entdecken, ist von zentraler Bedeutung für die Theorie des forschungsbasierten Lernens. Trotz der robusten

*Forschungsunterstützung ist DDL jedoch nicht weit verbreitet, auch weil es an praktischen und spezifischen Empfehlungen für LehrerInnen mangelt. Weitere Studien sind erforderlich, um die Behauptung zu untermauern, dass der Ansatz die Entwicklung verschiedener Sprachlernbereiche wirksam fördern kann. Dieser Artikel fasst relevante Theorien und Forschungsergebnisse über den Einsatz von DDL im Zweitsprachenunterricht zusammen und beleuchtet das Verständnis dafür, wie korpusbasierte Vokabularlehrstrategien in Englisch für akademische Zwecke (EAP) Kurse in nicht-englischsprachigen Ländern funktionieren können. Die Studienempfehlungen beinhalten einen korpusbasierten DDL-Rahmen zur Erweiterung des Wortschatzes der Studierenden und Vorschläge für zukünftige Forschungen.*

**Schlüsselwörter:** EAP, Zweitsprache, Vokabular, Korpora, DDL, forschungsbasiertes Lernen

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**Аннотация** (Ира Разикавати: Обучение на основе данных для расширения словарного запаса студентов педагогических направлений подготовки): Обучение на основе данных – индуктивный подход с применением компьютерных технологий и индексов компьютерной лингвистики. Данный метод дает возможность студентам анализировать различные языковые формы в любых контекстных ситуациях. Эти языковые формы заданы в системе индексов. Идея научить студентов пользоваться данным методом для освоения определенных языковых правил и образцов на примере работы с аутентичным материалом имеет центральное значение для теории обучения на основе данных. Тем не менее стоит отметить, что несмотря на мощную «раскрутку» данного метода, он еще не получил широкого применения, поскольку на данный момент ощущается недостаток в практических и других специальных рекомендациях для учителей по внедрению метода. Необходимо проводить дальнейшие исследования для того, чтобы подтвердить высказанное положение о том, что данный подход стимулирует освоение различных участков языкового пространства. В данной статье рассматриваются наиболее значимые теории и практические результаты использования метода обучения на основе данных при освоении второго языка; в работе также показано, как стратегии обучения лексике английского языка на основе корпусной лингвистики (английский язык для академических целей) могут применяться в тех странах, где английский язык не является государственным. Разработанные рекомендации опираются на данный метод и направлены на решение задачи по расширению словарного запаса студентов; в статье указываются также перспективы дальнейшего изучения данного вопроса.

**Ключевые слова:** английский язык для академических целей, второй язык, вокабуляр, корпус, обучение на основе данных, обучение через исследование

## Background

Acquiring a new language is in many respects challenging for language learners. Vocabulary acquisition can be especially demanding for learners of English as a Foreign Language (EFL), whose learning contexts are non-English speaking countries. Unlike second language (L2) learners who receive rich language exposure in school, EFL learners lack sufficient input in their learning environment (Kojic-Sabo & Lightbown, 1999). Moreover, EFL instructional texts and teacher education has paid little attention to vocabulary acquisition (Hunt & Beglar, 2005). The difficulty of acquiring a large vocabulary size becomes more apparent as students enter higher education. The increasing status of English as the dominant language of science has put greater demands for students to read English references for their study purposes. EFL instruction aiming at improving students' ability to read academic texts becomes paramount in various higher education settings.

Learning English for study purposes can be daunting for L2 including EFL students as it requires students' ability to think about academic content and convey abstract ideas in the language they are still learning (Nagy & Townsend, 2012; Snow & Uccelli, 2009). Students need to develop not only the breadth but also depth of their vocabulary knowledge. An immense amount of vocabulary is fundamen-

tal for them to read English texts independently. According to Nation (2006), students need to know 98% of the running words in a text for adequate comprehension, and even 98% of word coverage may not suffice for easy understanding of a non-fiction text (Carver, 1994; Kurnia, 2003). Nation (2006) estimates that students need to have a vocabulary size of 8,000 to 9,000 word-family for written text comprehension and of 6,000 to 7,000 for spoken text comprehension.

Mature readers additionally need to increase the depth of their vocabulary knowledge, which necessitates the mastery of a wide range of vocabulary knowledge: polysemous meanings; collocations; word uses and forms (Schmitt, 2014). Knowing vocabulary, therefore, entails having a large vocabulary size and understanding of the nuances of words' meaning for both receptive and productive purposes. Considering the complexity of learning vocabulary knowledge, developing student vocabulary for academic purposes requires word learning strategies beyond the generic approaches. Researchers and practitioners have examined different ways to find new possibilities for facilitating L2 learning more successfully in the classroom by incorporating digital technology.

Information and communication technology (ICT) is a common term to refer to the use of digital technology in language teaching and learning (Evans, 2009). ICT has incentivized EFL students in that it provides them with a tool to make learning more productive and self-regulated. Effective integration of ICT in the classrooms has been purported to bring about development in various learning skills such as "reasoning and problem solving, learning how to learn and creativity"; broaden and deepen learning; and increase interest in learning activities (Eadie, 2001, p. 28). The use of technology for language learning has evolved from what is termed computer-based training (CBT) and computer-assisted language learning (CALL) (Farr & Murray, 2016) to the highly innovative corpus-based approach following the growth in corpus linguistics research (Warren, 2016).

Research in L2 teaching and learning has been appealed to by the data-driven learning (DDL) approach, a term coined by Tim John (1991) to refer to the application of corpora to investigate language use. This approach, rooted in the principles of discovery or inquiry learning, allows the practice of learning English through the discovery of language patterns from the data presented in the corpus – an extensive collection of authentic texts either spoken or written on a computer for language analysis. A growing body of evidence from empirical studies in the second language (L2) classrooms indicates that corpora offer abundant opportunities for data-driven learning (DDL) potent for students' language development. Although perceived as a promising L2 learning approach, DDL appeared to encounter stagnancy on the classroom path. Notwithstanding the availability of free online corpora and classroom guides, DDL has not been "part of mainstream teaching practice" (Boulton, 2010, p. 534).

The primary purpose of this article is to present a literature review on the theoretical constructs and empirical findings which rationalize the practice of corpus-based vocabulary instruction in a reading English for Academic Purposes (EAP) classroom. Prior to the analysis of previous studies reporting the use of corpus-based DDL in the second language classrooms, the article reviews the discovery learning or inquiry-based learning theory which explains the philosophical constructs of the DDL approach. The findings of a case study in an EAP classroom in Indonesia illuminates how the perceived limitations and challenges of DDL may be addressed and informs the proposed framework for corpus-based vocabulary development. The recommendations include the practical implications for EFL classrooms and future research directions.

## Inquiry-Based Learning Revisited

The term inquiry learning is often used interchangeably with discovery learning to refer to the method of instruction which conceptual roots can be traced back to the works of the constructivists such as John Dewey and Jerome Bruner. Herbert Spencer's (1820-1903) notion of teaching students "how to think" instead of "what to think" seems to have significantly influenced Dewey (1910) in his publication of *How We Think* and Bruner (1961) in his notions of "learning how to learn" and "inquiry discovery" (Ornstein & Hunkins, 2016). Dewey (1910) asserted that students' experience and prior knowledge are valuable resources which students draw upon to make sense of new information, identify connections between past and present learning experiences, and construct solutions to solve problems. Bruner (1961) similarly believed that learning brings about powerful effects when students can discover new facts and relationships of those facts for themselves and which experiences are built up from their prior learning. Dewey's and Bruner's ideas of how knowledge is constructed become the foundation of discovery learning in that the approach engages students in pursuing their interests and questioning of the existing beliefs and assumptions.

Kirschner, Sweller, & Clark (2006) consider the pedagogy in this discovery learning umbrella as the minimally guided method in contrast to the direct instructional method which provides students with both concepts and learning strategies explicitly. Other corresponding pedagogical approaches include problem-based learning, experiential learning, and constructivist learning (Kirschner et al., 2006). Today, discovery learning appears to exist on a continuum from pure inquiry to guided inquiry. In this article, the term inquiry-based learning (IBL) refers to the learning approach that is inquiry-oriented and holds students accountable for their learning (Blessinger & Carfora, 2014). The approach the same time recognizes the teachers' role to scaffold the process of inquiry to achieve curricular goals (Coffman, 2017). Although the implementation IBL strategies can be context-bound depending on the students' needs and their learning goals, teachers play an essential role in designing structured activities that promote higher-level thinking, also known as, high-order thinking.

Hattie (2012) discusses the controversy over the level of directness necessary in instruction, suggesting that the explicit approach better promotes learning and teachers are responsible for enhancing student learning actively. He highlights the study finding of Alfieri, Brooks, Aldrich, and Tenenbaum (2011) examining the efficacy of discovery-based learning which concludes that students benefit more from instructional approaches that allow scaffolded tasks and feedback for them to construct new understanding built on their existing knowledge. In response to the critics of IBL including those of Kirschner et al. (2006), Blessinger & Carfora (2014) suggest that a significant number of studies has persuasively argued for IBL as a promising instructional strategy when properly designed and implemented. IBL can promote student engagement, motivation, autonomy, and problem-solving skills when the teacher plan the course and facilitate the learning effectively (Blessinger & Carfora, 2014, p. 5). The authors recommend that the teacher offer active and caring support to ensure a conducive learning environment and sufficient guidance for the students.

The contemporary IBL continues to be an approach to learning that is self-directed, question-driven, and problems relevant (Levy, Lameris, McKinney, & Ford, 2011). In achieving the expected learning outcomes, instructional goals, content, and practices must correspond to the learning assessment (Blessinger & Carfora, 2014). Although the students are held accountable for their learning, teachers as the subject matter experts need to provide ample support for them to engage in authentic and meaningful activities (Blessinger & Carfora, 2014; Coffman, 2017). As teachers engage students through the scaffolded learning process, the integration of digital technologies potentially enhances their learning.

Coffman (2017) asserts that the interaction between digital technologies and information improves inquiry-oriented learning. The critical elements of IBL as stated by Blessinger and Carfora (2014) – exploration and investigation; authentic inquiries using contextual and situated learning; and research-based approach – are in line with the elements of data-driven learning.

## Data-Driven Learning

The authenticity of the learning materials and students' engagement to discover the language rules and patterns from the concordance lines – list words within the contexts of each word's occurrences – are DDL attributes parallel to those of the IBL. The use of corpus linguistics – the compilation and analysis of corpora – was initially advocated by John Sinclair (Johns, 1994; Moon, 2007). The term data-driven learning (DDL) was later popularized to refer to the language learning strategy that allows students to be “language detectives” or “researchers” to explore language data (Johns, 1991). When Johns initially used DDL with his postgraduate students to improve their writing, he worked with the limited availability of concordancer compared to the present day (Boulton, 2012).

John (1991) claimed that this inductive approach benefits students more than the traditional grammar-based approach in that it allows them the opportunity to examine the linguistic patterns and generalize the rules from the language examples. The language teacher's role is to guide students with discovery strategies so they can “learn how to learn” (1991, p. 1). John's argument is relevant to the notion that L2 acquisition process can be more analytic than L1 since L2 learners have acquired a language system and received instruction in morphosyntactic rules which enable them to analyze a large unit of meanings into smaller segments (Wang, 2016). Sinclair (2004) suggests that for students to derive the most benefits from corpus resources, they need facilitation from teachers to investigate the complex corpus data. Therefore, productive corpus-based discovery learning activities as Keck (2004) put it, requires the collaborative efforts of teachers and students to select appropriate corpora, perform productive queries and interpretation of data to make generalizations of the language use.

Arguing against the critics that DDL might not be appropriate for a broader audience of language learners, Shaw (2011) states that the latest development has made corpus-based DDL possible to cater to different types of learners. DDL is presently more popular among language teaching practitioners as the development of computing resources has made corpora available online for language learners such as the free access to the Corpus of Contemporary American English (COCA) (Davies, 2008–), the British National Corpus (BNC) (BNC, 2018), and BYU-BNC (Davies, 2004–). Corpus linguistics has largely influenced language instruction today in different ways, including the development of corpus-informed materials, corpus-cited texts, and corpus-designed activities (Bennet, 2010). That said classroom materials have integrated language patterns and word frequency information derived from corpora; learning tasks have included analyses of authentic language samples retrieved from the corpora; and language samples in dictionaries contain more authentic corpus data.

To illustrate the implication of corpus linguistics for learning in the classroom, Johns uses the term “to cut out the middleman ... to give the learner direct access to the data” (1994, p. 30). Giving the students direct access to the language data emphasizes the students' active role for their learning, the discovery nature of the method, and the authenticity of the task. O'Sullivan (2007) offers a comprehensive account of the DDL benefits from the perspective of the process-oriented approach to language learning which conclusion suggests that corpus consultation increases learners' mental activity, cognitive abilities, metacognitive knowledge, and independent learning. Reviewing what empirical studies have found

on the use of the corpus-based DDL – its efficacy and challenges – is the next important step before advancing to the appropriate framework for vocabulary development in the EFL context.

## Corpora in Language Teaching and Learning

A large body of research in L2 learning has examined the direct applications of corpus linguistics in language pedagogy. The efforts stemmed from the projects of Collins COBUILD English Language Dictionary 1987 which language data was based on the analyses of electronic corpora (Biber & Reppen, 2015; McEnery & Xiao, 2010; Szudarski, 2018). Most studies within applied linguistics after this period, especially in the subfields of English for Specific Purposes (ESP) and English for Academic Purposes (EAP) have benefited from the corpus research and analysis data (Biber & Reppen, 2015). Keck (2004) states that the use of corpora in language teaching includes the domains of corpus-based language descriptions, corpus-based language analysis in the classroom, and learner corpus analysis. This section reviews research findings assessing the corpus-based language analysis in L2 classrooms. A meta-analysis of Boulton & Cobb (2017) systematically examined previous studies on the use of corpus linguistics for L2 learning. Other empirical study findings provide evidence for the rationale and strategies for using corpus consultation to increase students' knowledge in different language areas.

**Meta-analysis results.** The most recent, possibly the first meta-analysis on the use of corpus in language learning is that of Boulton & Cobb (2017). The study offers compelling evidence supporting the use of corpus linguistics for L2 development programs. The result of 64 meta-analyzable studies from a pool of 205 studies showed large overall effects for control/experimental group comparisons ( $d = 0.95$ ) and for pre/posttest designs ( $d = 1.50$ ) (Boulton & Cobb, 2017). Although it is rather early to claim that the approach may yield as strong results in real classrooms which conditions are more complex than those in the experimental studies, the high  $d$  values observed in various studies involving over 3,000 participants is quite encouraging.

In answering their research questions, Boulton & Cobb made three main conclusions. First, "DDL research is a flourishing field" with at least 205 publications reporting quantitative study findings since 2014 (2017, p. 381). Second, both the effectiveness and efficiency studies on the use of DDL to increase learners' L2 skills and knowledge yielded large effect sizes. Third, DDL showed consistent significant effects in situations where (1) the presence of native English instructors was limited; (2) courses targeted undergraduate and graduate learners as well as those of intermediate and advanced English levels; (3) computer- and paper-based concordancing were used; and (4) corpora were used either for a reference resource or learning vocabulary and lexicogrammar (2017, p. 383-385). A closer look into the individual study can provide a more explicit account of which language development area DDL may work most effectively.

**Authentic language input.** EFL learners are often disadvantaged by the lack of exposure to authentic language input compared to L1 or L2 learners. The non-native English teachers, grammar-based instructional materials, and direct instructional methods in a way constrain learners' access to the naturally occurring English such as the appropriate use of collocations and colligations. Students may be able to produce grammatically correct sentences, but their patterns are not common in English. The most significant benefit of Corpus-based DDL lies in the authenticity of the language to be analyzed by students (Clifton & Phillips, 2006; Romer, 2008). Using corpora in language classroom provides learners with nuanced language samples which usage of vocabulary, grammar, and functions are similar to those in natural settings (McEnery & Xiao, 2010).

Studies reporting the effectiveness of corpus-based DDL in undergraduate classrooms include those of Daskalovska (2015), Huang (2014), and Gordani (2012). Daskalovska (2015) compared the effectiveness of corpus-based activities and traditional activities for learning collocations among 46 first-year students in a university in the Republic of Macedonia. The study found that students in the experimental group, who used the online concordancer learned more collocations and showed better results on the test that measured their knowledge of verb-adverb collocations.

Previous empirical studies have yielded some valuable insights into the use of corpus-based DDL at the university level suggesting that concordance lines and other corpus query results provide learners with authentic samples of texts and vocabulary needed for language analysis and reference. Exposing students with how words are used in real texts rather than simplified texts tailored for L2 learning purpose potentially result in a more significant improvement in their vocabulary knowledge as well as the ability to comprehend and produce authentic language in the target language.

A plethora of other literature and research to date have supported the efficacy of corpus-based DDL to promote specific areas of language development. The approach facilitates the acquisition of English vocabulary (Karras, 2016), lexico-grammatical patterns (Huang, 2014; Liu & Jiang, 2009), and speaking fluency (Geluso & Yamaguchi, 2014). Students additionally improve their ability to use familiar words in new ways (Frankenberg-Garcia, 2012). Being engaged in corpus-based queries and analyses helps students develop their knowledge of linking adverbials in English (Boulton, 2009) and English verb-noun collocations (Chan & Liou, 2005) as well as strengthen their ability to use the passive voice (Smart, 2014).

**Attention in L2 learning.** Other benefits claimed concern with the development of students' metacognitive and cognitive skills through inductive and deductive reasoning activities (Boulton, 2009). Students enhance their language noticing and autonomy by engaging in inquiry-based activities (Boulton, 2017; Chambers, 2007; Godwin-Jones, 2017; Yoon & Hirvela, 2004). These findings are in agreement with the notions of Schmidt (1995, 2001) that attention plays a significant role in retention and all types of learning, including in second language learning. The implications for L2 learning include learners need to pay attention to the language input and compare their utterances and those of the target language speakers. By finding clues derived from language samples, L2 learners are expected to notice how language samples occur in specific contexts and generate principles of how the target language works (Schmidt, 1995).

Considering the favorable study findings in different contexts, corpus-based DDL seems to be an approach that embraces a broader range of opportunities for students to develop both their cognitive and metacognitive skills to acquire academic language. Although most of the research results are in support of corpus consultation strategies in second language learning, the findings are also subject to caveats. The limitations and challenges identified in the studies are to be considered along with the recommendations and implications for instruction.

## Addressing the Challenges and Limitations of DDL

In addition to its benefits, Liu and Lei (2017) state a wide range of challenges and limitations of DDL based on the findings of various studies. The challenges concern with the difficulty of corpus query analysis (Boulton, 2009; Liu & Jiang, 2009); the need for intensive training for corpus analysis (Boulton, 2009; Karras, 2016; Liu & Jiang, 2009; O'Keeffe & Farr, 2003); and the paucity and/or difficulty of access to corpus search engines (Kennedy & Miceli, 2001; Kosem, 2008; Liu & Jiang, 2009). The consequence that follows, students may be reluctant to conduct their corpus-based search due to the difficul-

ty of running the query in addition to analyzing and interpreting the query results. The DDL approach also seems to favor more the higher-level learners than the lower ones (Liu & Lei, 2017; Boulton, 2009) as sufficient analytical and linguistic skills are necessary to cope with the complexity of the authentic data presented in the corpus query results (Boulton, 2009).

Although corpus-based DDL may be most appropriate for university students having intermediate to advanced English proficiency, Boulton & Cobb (2017) consider this claim arguable since limited studies have examined the use of DDL at the secondary level. Karras (2016), one of a few studies investigating the use of corpus-based DDL among secondary students, found that allowing sufficient training time led to better results in the vocabulary acquisition programs targeting students in this education level. While generally computer-based corpora may be preferred due to the ease of access and the extensive data for analysis, fears and lack of technology in the classroom are other voiced concerns that can hinder the implementation of corpus-based DDL. Recent study findings have offered salient recommendations to address the perceived challenges of using corpus-based DDL effectively.

**Paper-based concordance.** Although computer-based corpora promise a more controlled “massive contextual exposure” to the target language compared to a regular reading or listening program (Boulton, 2017, p. 483), the paper-based concordancing can supplement or become an alternative to the web- or computer-based version. Studies have found that paper-based concordance lines offer similar advantages for language pattern analysis (Yilmaz 2017; Jalilifara, Mehrabib, & Mousavinia, 2014). Low-proficiency learners may also benefit from corpus-based learning by using prepared paper materials (Boulton, 2010). Similar to Boulton’s argument, there seems to be an agreement that paper-based concordance can be valuable in itself (Huang, 2014; Johns, 1991) or supplemental to provide authentic language data (Breyer, 2006; Frankenberg-Garcia, 2005).

**Lexico-grammatical approach.** The integration of complex syntax and multi-word unit instruction is another recommendation to increase the effectiveness of corpus-based DDL. Previous research examining the reading comprehension of undergraduate medical school students showed that students’ processing of texts in a word-by-word manner and their unfamiliarity with complex sentence structures resulted in unsuccessful chunking of ideas into meaningful units (Rasikawati, 2012). The study recommended that reading EAP classrooms need to include the teaching of complex syntax and “extensive practice for the students to chunk ideas at the sentence level” (2012, p. 19). Chan & Liou (2005) similarly suggest that even though the use of concordances scaffolded collocation learning, students with low proficiency levels can perform better with collocation instruction. Ashouri, Armandi, and Rahimi (2014) who studied the impact of corpus-based collocation instruction found that students who learned lexical collocations – chunks of words that often appear together – improved their collocational knowledge better than those learning individual words. The authors claim that corpus-based collocation learning “increases the quantity of learners’ mental interaction” and facilitate comprehension improvement (2014, p. 478).

L2 instruction that covers the use of authentic materials and instruction of lexical and syntactic knowledge can be referred to as the lexico-grammatical approach. Lexico-grammar, the unity of lexis and grammar, views lexicon and grammar as two integral parts of a language (Sinclair, 1991). Unlike the traditional grammar approach in language teaching, which consider vocabulary instruction separately from grammar, lexico-grammar instruction perceives learning multi-word sequences or language chunks – words that frequently appear together – in a sentence better facilitates language acquisition. Since learning vocabulary and grammar often takes place simultaneously, instruction of the two domains should be done at the same time (Liu & Jiang, 2009). The acquisition of common lexico-

grammatical patterns is expected to improve students' language ability, including reading as it enables students to process receptive vocabulary faster (Conklin & Schmitt, 2008).

## Implications for Instruction

Insights into the benefits and constraints of corpus-based DDL helps determine appropriate strategies and anticipate problems before adopting DLL in the classroom. The fact that college students have acquired a language before learning L2 thus possessed prior knowledge can be especially beneficial for facilitating students' attention to and analysis of the target language samples. Using corpus-based DDL for this group of students is promising as they can activate relevant schemata to analyze L2 corpus data and make inferences about the L2 patterns found in the data. The authentic learning materials and their relevance to students' study discipline are other contributing factors to the efficacy of the approach. Corpus-based DDL can additionally devise a scheme to improve undergraduate students' comprehension of academic texts through the instruction of multi-word sequences and intensive practice of identifying vocabulary and grammatical structures of specific academic discourse.

Empirical evidence also suggests that corpus-based DDL must take into account the difficulty of analyzing extensive authentic data, especially for the lower proficiency language learners. A paper-based concordance can provide equal benefit for language analysis while allowing scaffolded learning opportunities. This article also argues that EAP reading classrooms need to offer rich exposure to the vocabulary and linguistic patterns of academic prose through the instruction of multi-word sequences. Students' awareness of language chunks can help them cope with complex academic discourse in specific academic disciplines. These multi-word sequences encompass both idiomatic and non-idiomatic expressions (Biber, 2006).

In a nutshell, using a word appropriately depends on more than just knowing the word's definition. Students need to learn how to use the word in relation to other words. These constructs of teaching language in contexts serve as the foundation for the lexico-grammar instruction proposed. Based on this lexical and grammatical connection point of view, learning lexico-grammatical patterns from authentic language data stored in corpora may increase students' analytical thinking, language noticing, and acquisition.

## Corpus-Based DDL Framework to Augment Students' Vocabulary Repertoire

Reviews of inquiry learning theories and previous empirical research examining the use of DDL in L2 classrooms have unraveled essential implications for instruction. In achieving the goal of increasing students' vocabulary size and understanding of word nuances in a Reading EAP program, the student learning experience should comprise students' use of authentic materials and high-order thinking skills; students' engagement in problem-solving; and scaffolded inquiries.

Figure 1 illustrates the framework that the author proposes for enhancing students' vocabulary knowledge. The inquiry-based Reading EAP curriculum should include four curriculum elements – course content, instructional approach, activities, and assessment – within which a framework for enhancing students' vocabulary knowledge is developed. The framework includes key variables of learning structured in a recurring cycle of activities, and which interrelationships of the variables are identifying.

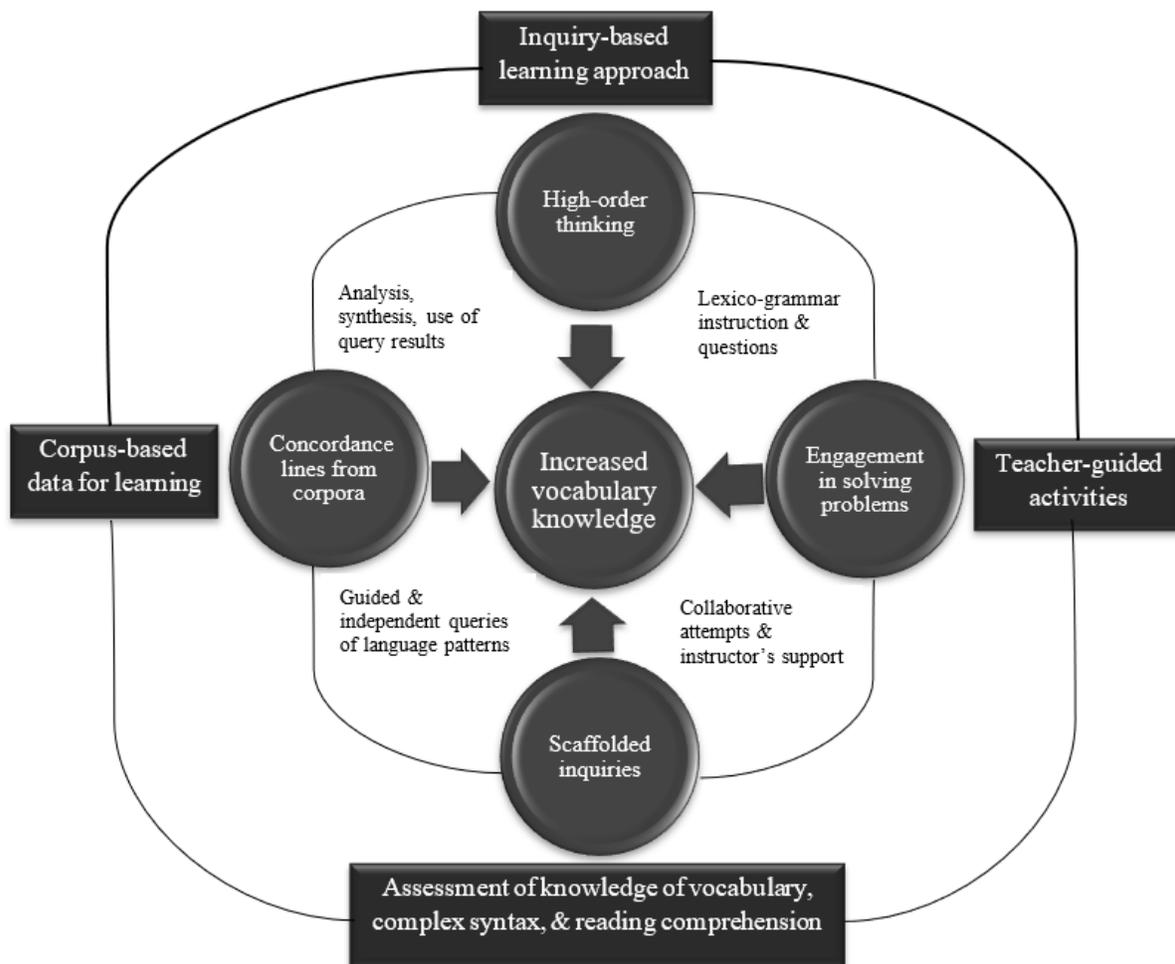


Figure 1. Framework for augmenting students' vocabulary repertoire

The cycle begins with instruction on complex syntax and multi-word sequences. The teacher prepares sets of questions to activate background knowledge, model purposeful inquiries, and stimulate high-order thinking. The questions may initially address students' problems as perceived by the teacher but gradually shift to students invented problems and hypotheses as they progress in their learning. Through collaborative work and with the teacher's support, students investigate their problems, collect data from corpus search, discuss how they can analyze the concordance lines, and come up with a synthesis of the lexico-syntactic pattern that emerges from the data. Comparing the patterns that students discover from the texts and the grammatical rules they have learned make their learning more meaningful as they can integrate the information they already know with their findings from corpus consultation activities. As students develop more confidence and better ability to run the corpus-based queries, they learn to solve their lexico-grammatical questions independently, share their findings in a small group or before the class, and practice using their new knowledge in reading and writing. Academic texts for reading activities may include texts in the students' discipline and various teacher-selected texts which type often appear in standardized English proficiency assessments. Including the two types of texts potentially increase students' motivation to read as they are relevant to their study major and need to perform well in a standardized English test, which is often required as a part of the

graduation requirements. Having students use their knowledge of words in writing will help them not only write in response to the reading input but also retain the multi-word sequences learned.

Varied strategies are critical throughout this cycle of activities to facilitate a better understanding of word nuances and syntactical patterns. Paper-based concordance activities can be applied at the early stage of learning before students transition to more substantial web-based corpus data. Sufficient training may likely take several first few meetings to ensure students understand different types of queries to run and results to expect from the queries. The guided inquiries must also include both instruction and modeling of how students can comprehend text by making appropriate chunking of ideas at the sentence level. Ongoing assessments of students' understanding and use of vocabulary in sentences are useful feedback to make any necessary adjustments throughout the program.

## Conclusions and Recommendations for Future Research

Understanding the benefits and constraints of corpus-based DDL helps in determining appropriate strategies and anticipating problems before adopting DLL in the classroom. Corpus-based DDL is a promising approach to enhance undergraduate students' comprehension of academic texts through the use of authentic readings, lexico-grammatical instruction, and analysis of language samples in academic discourse. Reading and analyzing texts that are relevant to their discipline and study interest potentially can increase students' motivation to learn. A corpus-based instructional framework for augmenting students' vocabulary knowledge need to ensure that all the curriculum elements – content, approach, activities, and assessment – are integrated and repeated to achieve the curricular goals, at the same time, promote greater autonomy on the part of the students.

Although many studies have found the use of corpus-based DDL beneficial for L2 students' language development, further research is still needed to provide support for the efficacy of the approach in various contexts. Classroom action research is an alternative to fill the gap between research and instruction in that teachers become more involved in applying the corpus-based DDL approach and evaluating its efficacy. Joint research projects between teachers as the direct users of DDL and the corpus linguistic researchers can establish a stronger connection between empirical evidence and classroom practice. Previous research has documented findings of how corpus linguistics has been used in specific instructional settings. While case studies are valuable channels for gathering detailed accounts of the problem, experimental studies involving large population promises generalization within the given contexts and replication in different settings.

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*Robin L. Henrikson (USA)*

## Building Purposeful Superintendent and School Board Relationships Through Examining the Historical Narrative of Evolving Roles

**Abstract:** *The author presents a summary of the changing role of the traditional superintendent within the United States through the lens of how this work can be challenged or encouraged by the relationship with her or his respective board. The author emphasizes how the evolving roles of both the superintendent and school board member have contributed to the lack of clarity around their respective responsibilities that has influenced relational factors between these two groups. The importance of building, nurturing and sustaining relationships between the superintendent and school board in order to be proactive and prepared to encounter the many issues that school districts face daily is integral to this conversation. School boards and superintendents must understand how to collaborate beyond simply abiding by their delegated role at the time to flourish and support a successful school district.*

**Key Words:** *superintendent, school board, evaluation, district leadership, communication*

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**摘要** (Robin L. Henrikson: 通过对角色变换的历史性叙事的研究，来建立管理者与学校理事会之间的有目的的关系。作者通过这样一个问题总结了美国传统管理者的角色变换，即这项工作是如何通过与现任理事会的关系被挑战或被鼓励的。作者强调了管理者和校理事会成员角色的不断演变是如何导致各自职责的不明确性，这样的关系因素使得这两个群体之间均受到影响。建立，维护和维持校长与学校当局之间关系的积极性与主动性，并准备应对学区每天要面临的诸多问题与挑战，这一点的重要性是此次对话不可或缺的重要组成部分。校领导与管理者需要学会看到并懂得他们是如何能够通过纯粹地扮演好自己被授权的角色而彼此进行合作，进而发展和支持一个成功的校区。

**关键词：** 管理者，校务委员会，评估，区领导

**摘要** (Robin L. Henrikson: 通過對角色變換的歷史性敘事的研究，來建立管理者與學校理事會之間的有目的的關係。作者通過這樣一個問題總結了美國傳統管理者的角色變換，即這項工作是如何通過與現任理事會的關係被挑戰或被鼓勵的。作者強調了管理者和校理事會成員角色的不斷演變是如何導致各自職責的不明確性，這樣的關係因素使得這兩個群體之間均受到影響。建立，維護和維持校長與學校當局之間關係的積極性與主動性，並準備應對學區每天要面臨的諸多問題與挑戰，這一點的重要性是此次對話不可或缺的重要组成部分。校領導與管理者需要學會看到並懂得他們是如何能夠通過純粹地扮演好自己被授權的角色而彼此進行合作，進而發展和支持一個成功的校區。

**關鍵詞：** 管理者，校務委員會，評估，區領導

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**Zusammenfassung** (Robin L. Henrikson: Aufbau zielgerichteter Beziehungen zwischen Superintendent und Schulrat durch Untersuchung der historischen Narrative von sich entwickelnden Rollen): Der Autor gibt eine Zusammenfassung der sich ändernden Rolle des traditionellen Superintendenten in den Vereinigten Staaten durch die Frage, wie diese Arbeit durch die Beziehung zum jeweiligen Vorstand herausgefordert oder gefördert werden kann. Der Autor betont, wie die sich entwickelnden Rollen sowohl des Superintendenten als auch des Schulvorstandsmitglieds zu der Unklarheit über ihre jeweiligen Verantwortlichkeiten beigetragen haben,

*die die Beziehungsfaktoren zwischen diesen beiden Gruppen beeinflusst haben. Die Bedeutung des Aufbaus, der Pflege und der Aufrechterhaltung der Beziehungen zwischen dem Schulleiter und den Schulbehörden, um proaktiv und bereit zu sein, sich den vielen Problemen zu stellen, mit denen die Schulbezirke täglich konfrontiert sind, ist integraler Bestandteil dieser Konversation. Schulleitungen und Superintendenten müssen lernen, zu sehen und zu verstehen, wie sie über die reine Einhaltung ihrer damaligen delegierten Rolle hinaus zusammenarbeiten können, um einen erfolgreichen Schulbezirk zu entwickeln und zu unterstützen.*

**Schlüsselwörter:** Superintendent, Schulausschuss, Evaluation, Distriktleitung

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**Аннотация** (Робин Л. Хенриксон: Выстраивание целенаправленных отношений между суперинтендантом и советом школы на основе изучения исторических нарративов о меняющихся социальных ролях): автор представляет обзор дискурса о трансформирующейся роли суперинтенданта в США, рассматривая вопрос, как этот вид деятельности, завязанный на контактах с администрацией школы, должен отвечать на вызовы времени и находить соответствующую поддержку. Автор акцентирует внимание на том, как трансформация ролей, наблюдаемая с обеих сторон (суперинтендант – администрации школы), спровоцировала ситуацию, когда представления о компетентностных полномочиях участников дискурса размыты, и как это повлияло на характер взаимоотношений между данными группами. Значение выстраивания отношений между руководством школы и руководителями системы школьного образования, необходимость налаживания данного контакта, его поддержания и сохранения на стабильной основе является интегративной составляющей данного дискурса. Это необходимо для того, чтобы обладать необходимой инициативой и быть готовым к решению тех проблем, с которыми ежедневно приходится сталкиваться органам системы школьного образования. И администрация школ, и суперинтенданты должны научиться видеть и понимать, как выстраивать совместную работу не только в рамках определенных ранее компетенций, но и в свете происходящих трансформационных процессов – на благо успешного развития школьных округов.

**Ключевые слова:** суперинтендант, комитет по школьному образованию, администрация округа

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*He (the superintendent) is hired and can be fired by the board so he always has to be circumspect in his behavior toward them. He is also extremely vulnerable to the press and to pressure groups in the community. Finally, he can be and usually is severely limited because of our inadequate financial arrangements for supporting our schools. So, his condition is one of power as regards the teachers and one of weakness so far as the school board and the community are concerned. Nevertheless, despite the weakness of some aspects of his position, he is still the most important person in any school system in terms of potential for influencing the quality of work that goes on in the schools. (Callahan, 1966)*

## Introduction

With a recognition that school boards do in fact have an impact on student learning (Alsbury, 2015) it is essential to better understand not only how they operate effectively as one voice, but also how they support the leader of the school district: the superintendent. There are many opportunities for school boards and superintendents to better learn their respective roles and responsibilities within a school district. It is also imperative for these individuals to adopt strategies for establishing a foundation for a strong working relationship to navigate what is becoming a more political and divisive educational landscape. There is startling little research on the relationships between school board and superintendents (Shelton, 2015). Communication, collaboration and ongoing relationship-building are key skills

that without, often leave the superintendent and school boards at odds with one another (Mountford, 2008).

## Evolving Roles of the Superintendent and School Board

***Role of Superintendent Over the Past Two Centuries.*** Superintendents were once hired as state representatives until the common school model became more pronounced, recognizing the local characteristics, needs and demographics of individual districts that needed representations. Over the past 200 years, the role of the superintendent has evolved from a managerial position, to one of an instructional and political leader within a community (Kowalski & Brunner, 2011). Interestingly, education was not one of the responsibilities of the federal government by the architects of the Constitution, but allocated to states to control (Bogotch, 2004). In the early 1800's, states recognized their responsibility for education and leadership in schools (Newsom, 1932; Stufflebeam, 1994). The first superintendents were representatives for schools within an entire state, whose primary goals were to plan common school systems, report on management of public funds, and provide information to the state regarding school-related issues. With emerging recognition of the unique context and needs between rural regions and urban areas, including handling issues of inequity, there was a push to advocate for the common school model. Thus, local control was given to districts and/or schools to hire superintendents to become their representative (Kowalski, & Brunner, 2011).

This attention towards local control was partially the result of a general dissatisfaction with the school system at the time by the Commissioner of Education, Horace Mann in 1837. He analyzed many school systems across the world and with the help of a committee, made efforts to reform the education system through the recharacterizing of both the school board and superintendent (Ellis, Golz, & Mayrhofer, 2014). Politics within cities grew and the rise of special interests amongst school board members became increasingly present. Therefore, it was decided that less power ought to be given to fewer school board members to represent the interests of the community and provided the superintendent the authority to run the district's operations. This sole individual was held accountable for the management by the board and community (Callahan, 1966). Thus, in 1837, the first superintendent, Oliver Steele, was appointed in Buffalo, NY and two years later Nathan Bishop was appointed in Providence, RI (Mowry, 1894). Ironically, as Stephens (2007) noted, the board of directors still maintained authority over various departments and programs within the schools whereas the superintendent, while still accountable, had very little actual authority over the decisions made. Mowry (1894) explained that the superintendent would only be called upon to perform certain duties under the direction of a school board member who provided oversight via a school committee, rendering the superintendent virtually powerless. Struggling with power and authority between these two roles was an embedded and perhaps unintended tension from the very origins of these roles (Nir & Eyal, 2003). This tenuous relationship and role distinction between school board members and the superintendent and are still apparent today.

The evolving role of the superintendent from the early 1900's to present was conceptualized through four roles: a) *teacher-scholar*, b) *organizational manager*, c) *statesman, or democratic leader*, and d) *applied social scientist*. (Callahan, 1966). Kowalski (2005) added a fifth role that carries into our present day: superintendent as *communicator*. The first role that characterized the superintendent position was that of a "teacher of teachers," or as Callahan (1966, p. 187) wrote, "scholarly educational leaders." This role characterization spanned from about 1865 to 1910. The purpose of the superintendent during this time was to be an instructional leader who supervised classroom instruction and curriculum. This in

turn allowed school board members to focus on legislative functions and managing and overseeing district operations (Glass, Bjork, & Brunner, 2000; Kowalski, 1999; 2005). These superintendents were teachers of teachers, known scholars, and experts in pedagogical matters. Superintendents saw themselves as educational leaders of their communities, both within the schools and amongst the community, while the most astute superintendents also being attentive to financial and public relations-related issues (Bogotch, 2004; Callahan, 1966).

The second role of superintendent, spanning about thirty years, was that of an “organizational manager” (Kowalski, 2005; Bjork, 2008). During this era, millions of immigrant families entered the United States, the majority of whom remained in eastern cities. While most school districts were in rural areas, most school children began to attend urban school districts. This in turn created a rapid increase of school-age children enrolling in urban public schools (Callahan, 1966). This left educators grossly unprepared and underfunded in their ability to provide quality educational programs. Perspectives on increasing the efficiency of education took hold as large city school districts grew in student numbers and school districts were forced to tax citizens in order to deal with the financial hardships that had been growing. At this same time, an ideology of the “prestige of the businessman” profile was on the rise (Bogotch, 2004; Kowalski & Keedy, 2005). This resulted in shifts toward a more corporate, task-oriented model of school board and superintendent governance (Glass, et al., 2000; Kowalski, 2005). Growing skepticism and dissatisfaction with the traditional model of education grew to more of a business model of education with pressure for reformation from special interest groups (Bogotch, 2004; Callahan, 1966; Glass, et al., 2000). During this shift, control of more decision-making was granted to the superintendent as the need for superintendents to understand both organizational efficiency and be equipped with financial acumen increased (Callahan, 1966; Glass, et al., 2000). The impacts of this era are still apparent today through the ways in which courses are designed as individual entities with educators and, especially in higher grade levels, experts of specific topics.

After the Great Depression and through the second World War, a shift towards more of democratic, community-minded education spawned the next role of the superintendent- that of an “educational statesman” or in other words, “democratic leader” (Bjork, 2008; Kowalski, 2005). This was the result of an often outright rejection of the business model within the educational setting. This shift towards a community-centered, political and democratic leader shaped the superintendent role during this time (Stephen, 2007). Kowalski (1991) wrote,

Specific obligations include (1) building a symbiotic relationship between the school district and the community, (2) informing the public of educational needs, (3) bringing people together to create visions and goals, (4) interpreting educational goals to the public, and (5) building support for school initiatives. As policy making shifts toward the local level because of deregulation and decentralization, these responsibilities become increasingly important (p. 314).

However, general discontent emerged regarding the lack of accountability and recognition of the complexity of this position. The “educational statesman” nomenclature also did not acknowledge the need to be astute to the increasing level of special interest groups involved in public education (Bjork, 2008).

The fourth role of the superintendent became the “applied social scientist” that spanned mid-1950’s to the mid 1970’s (Callahan, 1966; Bjork, 2008). This role emerged to be more attentive to the political tensions and issues that influenced the superintendent’s decisions as well as the governance of the school district. Superintendent preparation programs increasingly focused on understanding the community, social and political issues that would impact a district and hence, the success of a superintendent. Thus, the increasingly complex role of the superintendent emphasized and sought to analyze edu-

cational leadership practices that which characterizes an effective leader. This included a greater understanding of organizational theories both within the educational setting as well as within the community (Fusarelli and Fusarelli, 2005). While the role of the superintendent is ever evolving, the effort to study politics within the educational system was reinvigorated during the early 1970's and continues today (Bjork, 2008; Fusarelli & Fusarelli, 2005).

This final shift to superintendent as "communicator" (mid-1970's) is still prevalent in today's era of education reform (Bjork, Kowalski, & Browne-Ferrigno, 2014). This shift came about due to an increased importance on high stakes accountability, No Child Left Behind and Race to the Top initiatives that have charted the landscape of public education over the past thirty years. The superintendent is required to understand how micropolitics shape both the organizational setting, allocation of resources and community relations (Bjork, 2008). With this is the paradigm shift from working in isolation to collaborating and distributing leadership amongst an organization (Bjork et al., 2014). Emphasis on testing, results-oriented programs and improved teacher evaluation systems, coupled with the lack of funding for education, created an even more complex set of responsibilities for the superintendent. With this increasing level of accountability, superintendents needed to become expert communicators to the educators within their district, their community and serve as the primary source of information to their boards (Bjork et al., 2014). In fact, many states and certification standards for superintendents include effective communication as a competency (Kowalski, 2005). However, therein lies the issue with conceiving the superintendent as the communicator; it is difficult to measure or qualify what effective communication is given the various audiences and purposes of this role (Kowalski & Keedy, 2005). As such, various tensions arise amongst groups who work with the superintendent, with perhaps the highest stake relationship: the school board.

***History and Role of the School District Board of Directors.*** Such as in the case of the evolving role of the superintendent, the school board director role has changed over time. However, two guiding principles have remained consistent throughout history. School board members have always felt pressure to listen and advocate on behalf of their constituents and be expert decision-makers for running an efficient school system (Merz, 1984). One can trace the history of the superintendent role to see how the balance between this position and the school board has shifted over time and in relation to one another.

Perhaps the earliest recorded history of the school board was in 1645. The town of Dorchester, New England ordered that,

three able and sufficient men of the plantation be chosen to be wardens or overseers of the school, who shall have the charge, oversight, and ordering thereof and of all things concerning the same in such manner as is hereafter expressed and shall continue in their office... (Mowry, 1894, p. 39).

Mowry (1894) made the case that during this time, representatives were often educated, clergy members, physicians or members of the legal profession. Serving on this committee was not perceived as a political stepping stone nor did it have any perceived underlying special interest intentions. However, as populations grew into cities, in 1895 Mowry advocated for a school superintendent appointment who better understood the study of education (Mowry, 1894; Callahan, 1966). In part of his proclamation, one of the founders of the American school system Horace Mann, included the need for school districts to be controlled by lay boards of education in order to provide heterogenous representatives

including non-partisan and non-sectarian (Kirst, 2008). Thus, in 1837 the first superintendent was appointed in Buffalo, NY (Mowry, 1894) as described in the previous section.

Modeled after the New England method of controlling schools through town meetings, school boards were first established in Massachusetts in 1826. The principle of maintaining local control over education created significant growth in school board governance in the 1800's (Kirst, 2008). Joseph Rice, an early advocate of progressive education, believed there were four basic factors influencing the quality of schools; school boards being one of these. However, typically during this time school board members were selected according to special interests, politics and perceived power (Callahan, 1966). School boards in rural communities continued to grow but in urban areas, due to perceived partisan politics and corruption within the education system, reform aided in actually centralizing operations, expertise and efficiency through non-political control at the district level (Kirst, 2008). At this time, New York City had 21 members at the time and appointed by the mayor. Some of the reforms included reducing the number of school board members, elected at large, and void of political connections (Callahan, 1966; Gersman, 1970; Kirst, 2008).

Perhaps it was the seminal work of Draper, Powell and Poland called "The Committee of Fifteen," commonly referred to as "The Draper Report" (Callahan, 1966; Merz, 1984) that attempted to clearly define the work of the school board and recognized the issues inherent to this position. The authors of this report advocated for complete removal of politics within the school board position and to reduce the number of board members to no more than 5-7 depending on the size of the district. The authors believed that the mayor should appoint the superintendent as well as the school board. Their argument was that the mayor is looking out for the best interests of the community as a whole and the persons leading the schools should promote citizenry and the best interest of the community as a whole. The authors of the Draper Report also advocated for the school board to not be able to benefit personally from their work in order to ensure the best individuals for this work and to eliminate partisanship. This appeal sparked so much debate that school boards were nearly dismantled during this time (Draper, Powell & Poland, 1895; Merz, 1984). A couple of other interesting things to note about this report is their advocacy of two branches of governance. One branch called the "School Director" who oversaw the executive, business side of the administration as well as veto power and the other branch called the "School Council." This branch would be the carrying out of duties of the school operations, i.e. the superintendent (Draper et al., 1895). However, they also advocated for the school board director to "give his entire time to the duties of his position" (p. 121). While the Draper Report advocated for these two positions to be equal, the veto power of the "School Director" branch intentionally cast this position more powerful than the other. While obviously not all of these recommendations were implemented, the Draper Report launched years of debate over the role and purpose of the school board which attempted to more clearly define roles between these two groups well into the 20<sup>th</sup> century (Merz, 1984). With the seemingly unclear and often times interchangeable roles of both the school board and the superintendent, it rose to the highest level of conflict in 1895, influenced by Draper, Rice (an educational leader) and other prominent educators at the time (Draper et al., 1895; Callahan, 1966). As Callahan (1966) summarizes, the basic issue put forth by Rice was simply: *who would run the schools?*

This debate spanned years. After much debate the general consensus was that the board is in charge of hiring the superintendent who would be in charge of four major areas: the control of the course of study, the selection of textbooks, selection of teachers and supervision (Callahan, 1966). However, no matter how much independence the superintendent had, the school board still had the authority to hire, retain or dismiss the superintendent which maintained that power hierarchy between the school board and superintendent. This continued to create difficulties with the school board overstepping

their duties and interfering with the responsibilities of the superintendent (Bjork, Glass, & Brunner, 2005).

The expectations of the school board in the early part of the 20<sup>th</sup> century emphasized board members be experts in educational issues and less on the politics within the community (Merz, 1984). Those running for the position in an election weren't required to have any specific mandate or platform from which they would be knowledgeable about. Moreover, they lacked opportunities and knowledge of the daily operations of the district which prohibited their ability to question decisions made by the superintendent. (Merz, 1984; Kirst, 2008). In the 1920's board members often held professional roles and/or were businessmen within their communities and typically could only afford one to two times per month to meet. In fact, Cubberly, dean of the Stanford School of Education advocated for school board members to be professional businessmen and bankers since they would be efficient and not meddle in the affairs of the district operations (Mountford, 2008). It was at this time that Cubberly also advocated for the need to clearly delineate the work of the board and the superintendent. He wrote that the responsibility of the superintendent was to operate the schools while the board was to decide policy (Mountford, 2008). While the roles were now clearly defined, challenges continued with the implementation of this practice.

The latter half of the 20<sup>th</sup> century led to various role changes by the board, led mostly by the given period's political and social pressures (Merz, 1984; Cistone, 2008; Kirst, 2008). By the 1960's their primary responsibility was to mediate policy conflicts and was often little more than a rubber stamp of approval (Kirst, 2008). The onset of the 1980's led to a huge inception of initiatives and programs as well as special interest groups being introduced into educational policy. Programs then required in public education included special education, bilingual education, and health services to name just a few (Kirst, 2008). These policies reduced the local power of the board in some ways due to the requirements from the government to implement these programs rather than leaving the power to the board to make these decisions. With the onset of the 21<sup>st</sup> century, the National School Board Association proclaimed that the two primary purposes of the school board were to ensure student achievement and engagement with the community (Gemberling, Smith, & Villani, 2000). Alsbury (2015) wrote that school boards across the United States varied widely, but typically take one of two extremes. The first being a political entity solely obligated to be a communication conduit between the schools and public. The other extreme is the call for board members to participate in every facet of the school. As Albury (2015) also noted, this is reflective of the origin of school board members. With more accountability for implementation of academic and other student programs, more emphasis was on school boards to ensure student learning was prioritized (Hess & Meeks, 2010). Perhaps because of this pressure, there has been an emphasis on more of a distributed leadership model of governance that emphasizes leadership rather than simply oversight, not only with the superintendent, but school leaders and community (Hess & Meeks, 2010). Given the details of this report, the evolving role of the school board is ongoing.

## Demographics of Superintendents and School Board Directors

One of the main sources of conflict, according to Mountford (2008) is equality of representation. Therefore, it was important to include a section in this article on the demographics of individuals holding these two roles. The review of research on the roles and responsibilities of both superintendents and school board directors shows that up until the mid 1900's, they were encouraged to be businessmen and men of good standing within the community (Callahan, 1966; Draper, et. al, 1895; Mountford,

2008). However, research suggests that role identity of school board members shape the ways in which they make decisions (Bartanen, Grissom, Joshi & Meredith, 2018).

The seminal study conducted in 2000 by Glass, Bjork and Brunner provide a comprehensive overview of the superintendency, both in personal characteristics and in relation to their work. They found that almost 95% were white, and 86.6% were male. In a 2007 study by Glass & Franceschini in partnership with the American Association of School Administrators (AASA), women are comprised of 22% of the superintendents across the United States and only 6% are non-white. A follow-up report was published nearly a decade later which shows that females make up 27% of the superintendent population (AASA, 2015).

According to Hess and Meeks (2010), school boards are more diverse than other elected officials and are typically split equally between men and women. The study used in a report from Hess and Meeks (2010) was from a stratified sample of school board members across the United States. According to the authors of the report, 80.7% of the respondents are white, 12.3% are African-American and 3.1% are Hispanic. They note that larger districts are more likely to include minority board members. Board members are educated to a much higher degree than the general adult population as well as have higher annual incomes than average. When asked to identify their general political views, 47.3% responded as moderate, 32.3% as conservatives, and 20.4% as liberals (Hess & Meeks, 2010 p. 12-13). Hess and Meeks also reported that 56% were male and 44% were female at the time of the study. The two highest instances of occupations of board members include connections to the field of education and business. Almost a decade later, in 2018 another report was published by the National School Board Association that showed an increase in female school board members making up 50% of this population. 78% were White, African Americans represented 10% of the population of board members and 3% were Hispanic or Latinx.

This summary of the comparison between the demographics of superintendents and school board members is one important aspect in providing equity in voice of both the community in schools and externally. It also provides a brief snapshot into the composition of the board and superintendent working alongside one another and how this may help or hinder their ability to communicate effectively.

## Relationship Between School Board and Superintendent

Since the beginning of the shift from management of the district from the school board to the superintendent in 1837, there has been tension between these two roles. As Mowry (1894) wrote,

[f]rom the beginning, in this country, the school committees, or school boards, have had full control of the schools. When they appoint a superintendent, they do not immediately and willingly transfer the authority to him and hold him responsible for results. Far from it. They have generally made him the 'agent,' to do their bidding, and have been exceedingly careful that he does not have a chance to get the reins into his own hands and drive the team himself. (Mowry, 1894, p. 41)

Perhaps if the creation of these two distinct, yet intertwined roles had been clear and separate from the beginning, there would not be this inexorable issue pervasive today. Yet, twenty years into this century, the question of role identity remains.

Recognizing this, school boards and superintendents have an opportunity to use this challenge to strengthen their partnership to impact the systems that they represent. The discussion around areas of

strength and conflict will include other, more specific themes that are often reflective of the politics of that time. Clear communication and opportunities to nurture relationships will also be a key theme throughout this next section.

***Building and Sustaining School Board and Superintendent Relationships.*** Maintaining a strong relationship between the board and superintendent is vital. Nurturing this should be the responsibility of both the superintendent and the school board (Cleveland, Petersen, Sharp, & Walter, 2000). It is important to note that while the media portrays an often troubling outlook on the relationship between the superintendent and board that results in a high superintendent turnover, there is insufficient evidence to support this notion (Grissom & Andersen, 2012). In fact, Glass & Franceschini (2007) found that 93% of superintendents, say their relationships with their board members are either very good or good. However, having stated this, the primary cause of superintendents exiting their position is due poor relationships and conflict between themselves and their board (Grissom & Andersen, 2012), hence it is a fundamental component of the current dialogue.

Clearly the overarching issues that arise given any area of education are increasing demands with less resources to meet them (Merz, 1984). The only constant within the superintendent and board relationship is that there will indeed be conflict (Hoyle & Sklyre, 1999; Mountford, 2008; Kowalski & Brunner, 2011). On a broad level, the relationship between the superintendent and the school board can be tenuous at best. Variables that influence this relationship include the size of the district, the demographics of both the board and superintendent, political pressure the number of special interest groups within a community and the level of pressure that is exerted by such groups on the school board (Kowalski & Brunner, 2011; Bjorke & Lindle, 2001). Mountford (2008) also included more specific issues that these groups ought to acknowledge: a) changes of philosophy between new generations of board members, b) disparate beliefs and attitudes, c) increasing accountability, d) increasing resistance to service and e) public apathy for education (p. 85). Given the complexity of the roles, it can be difficult to nurture and sustain collaborative and trusting relationships while at the same time facing constant pressure from external forces.

Historically, the sources of tension stem from four main areas that include: a) confusion over roles and responsibilities, b) power struggles, c) motives for board service, and d) equality of representation (Mountford, 2008, p. 85). As already outlined, these issues have clearly been shown to be prevalent across the history of board governance since its inception. Glass (2000) aptly foretold the influences and pressure that multimedia would play within the politics of the district. Because of growing transparency through multimedia, this pressure results in strained relationships and power struggles that are ever more visible today. This often leads to a higher level of superintendent turnover. When the board loses faith in the authority of the superintendent to make crucial decisions for the district, that trusting relationship is weakened and/or disregarded.

***School Board Evaluation Practices as a Help or Interference with Role Clarity.*** Analyzing the evaluation practices is an important consideration when discussing role clarity. DiPaola & Stronge (2003) emphasized that a major problem in the evaluation process is the lack of clearly defined goals and job expectations. In fact, most of the evaluations between the board and superintendent are “neither uniform nor effective” (Mayo & McCartney, 2004, p. 31). The results of the evaluation often reflect the one or two politically-based topics of the year or of vocal advocates representing certain issues (DiPaola & Stronge, 2003; Mayo & McCartney, 2004; Banks & Maloney, 2007). Evaluation expectations add to the delicate relational balance between these roles given an ever-changing political landscape that add to the perceived success of the superintendent by the board and community.

The superintendent (sole employee) is evaluated by five different people resulting in either averaging out the opinions or providing five different sets of feedback. Neither of these methods provide clear feedback (DiPaola & Stronge, 2003; DiPaola, 2010). To complicate matters, school board members rarely have the expertise to perform an effective evaluation (Mayo & McCartney, 2004; Eadie, 2008; Dawson & Quinn, 2010; Opstad, 2010). Unfortunately, superintendents have claimed that only when relationships are strained and boards are looking for superintendent dismissal do they take the evaluation process seriously (DiPaola & Strong, 2003).

Superintendents are often the number one source of information to the school board. This also holds true with both the data and process for evaluation (Merz, 1984; Opstad, 2010). Tekniepe (2015) found that when superintendents perceive their board members to hold the skills and knowledge to effectively evaluate the performance of the superintendent, the strength of their relational trust grows. Conversely, when the superintendent loses trust in the board often results in dismissal of the superintendent.

## Conclusion

With ever-increasing accountability to meet the diverse needs of students as well as meet programmatic requirements with scarce resources, it is important to note that a growing body of research shows a connection between student learning and district level leadership-i.e. the superintendent and school board (Waters & Marzano, 2007; Shelton, 2011). Clear and effective communication is essential to the board/superintendent relationship (Hendricks, 2013). Dervarics and O'Brien (2011) recommend that effective boards and superintendents lead as a united team, each recognizing their roles with strong collaboration and trust. The ability to manage and balance this conflict is essential to the success of the superintendent (Hoyle & Sklra, 1999, p. 407). Therefore, it is essential that the superintendent create and sustain open dialogue, provide opportunities for board input on strategies, procedures and facilitate a team approach to decision making (Banickis & Pancha, 2011).

It is also critical that the superintendent provide input into the evaluation process to ensure alignment of evaluation with actual responsibilities (Hendricks, 2013). This helps to maintain a clear channel of communication regarding a shared vision between and amongst the group members. Proactively developing and implementing a clearly defined evaluation process is essential to foster relationships between the board and the superintendent. It is also a means for providing direction and protecting the superintendent during times of stress or turmoil due to political pressure, district issues or relational conflict. This process is critical for clarifying the role of the superintendent and promoting dialogue around the role of the board to help nurture this relationship. Ongoing team building, education and professional development are key components of not only clarifying respective roles but also deepening and nurturing relationships that are key to successful educational leadership.

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Marianna Richardson, Ryan Stenquist, & Jennifer Stenquist (USA)

## Experiential Learning in Business Communication: Starting a Peer-Reviewed Student Journal and Podcast

**Abstract:** Ancient Greeks such as Plato, Socrates, and Aristotle realized the need for combining intellectual, theoretical learning with practical, real-world experiences. Modern educational theorists continue to make similar pleas for the need of a more holistic and experiential view of education. To promote experiential learning in business communication, Brigham Young University – Provo (BYU) started a peer-reviewed student journal and podcast for business students. The students' experiences mirror Kolb's experiential learning theory cycle (1984) and Mezirow's theories on critical reflection and transformative learning, (1990, 1998, 2000). Students' reflective comments were reviewed using Morris' (2019) five characteristics of concrete learning experiences. Additionally, student ratings for this course are compared to other business management courses at BYU. These comparisons illustrate the high rating students give experiential learning courses. As the journal and podcast continue to grow in popularity, the opportunities for students have also grown because the students are gaining practical experience for future careers.

**Keywords:** Experiential learning, business communication, university instruction

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112

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**摘要** (Marianna Richardson, Ryan Stenquist, & Jennifer Stenquist: 商务交流中的体验式学习：撰写经过同行评审的学生期刊和播客):

关于各年龄段和学习阶段的体验式学习的讨论始于古希腊哲学家 (Crosby, 1995 年; Stonehouse, Allison 和 Carr, 2011 年), 并持续到今天 (Dewey, 1938 年; Kolb, 1984 年; Mezirow, 2000 年; Morris, 2019 年)。为了促进商务交流中的体验式学习, Marriott 商学院开设了由商学院学生为本专业的同学撰写的并经过同行评审的期刊, 名为《商学院学生点评》(MSR), 以及名为“衡量成功权”(MSR) 的商业播客。他们的经验反映了 Kolb 的体验式学习理论周期 (1984) 和 Mezirow 的批判性反思与变革性学习 (1990, 1998, 2000), 二者皆是传授 MSR 课程的标准。运用 Morris (2019) 的具体学习经验的五个特征对学生的反思性评论进行了审查。此外, 将 MSR 课程的学生等级与其他经济管理课程进行了比较。

这些比较说明了较之主要运用传统的教学技术的课程, 学生对体验式学习课程的评价更高。

随着期刊和播客的日益普及, 学生有机会提高他们的写作, 编辑以及广告技巧并对他们的未来职业有助于实践性的学习。

**关键词:** 体验式学习, 商务沟通, 大学教学

**摘要** (Marianna Richardson, Ryan Stenquist, & Jennifer Stenquist: 商务交流中的体验式学习：撰写经过同行评审的学生期刊和播客):

關於各年齡段和學習階段的體驗式學習的討論始於古希臘哲學家 (Crosby, 1995 年; Stonehouse, Allison 和 Carr, 2011 年), 並持續到今天 (Dewey, 1938 年; Kolb, 1984 年; Mezirow, 2000 年; Morris, 2019 年)。為了促進商務交流中的體驗式學習, Marriott 商學院開設了由商學院學生為本專業的同學撰寫的並經過同行評審的期刊, 名為《商學院學生點評》(MSR), 以及名為“衡量成功權”(MSR) 的商業播客。他們的經驗反映了 Kolb 的體驗式學習理論周期 (1984) 和 Mezirow 的批判性反思與變革性學習 (1990,

1998, 2000), 二者皆是傳授 MSR 課程的標準。運用 Morris (2019) 的具體學習經驗的五個特徵對學生的反思性評論進行了審查。此外，將 MSR 課程的學生等級與其他經濟管理課程進行了比較。

這些比較說明了較之主要運用傳統的教學技術的課程，學生對體驗式學習課程的評價更高。

隨著期刊和播客的日益普及，學生有機會提高他們的寫作，編輯以及廣告技巧並對他們的未來職業有助於實踐性的學習。

**關鍵詞：**體驗式學習，商務溝通，大學教學

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**Zusammenfassung** (Marianna Richardson, Ryan Stenquist, & Jennifer Stenquist: *Erfahrungsbasiertes Lernen in der Business Kommunikation: Start eines peer-reviewed studentischen Journals und Podcast*): Die Diskussionen über das Erfahrungslernen für alle Altersgruppen und Lernstufen begannen mit klassischen griechischen Philosophen (Crosby, 1995; Stonehouse, Allison, & Carr, 2011) und dauern heute noch an (Dewey, 1938; Kolb, 1984; Mezirow, 2000; Morris, 2019). Um das erfahrungsorientierte Lernen in der Geschäftskommunikation zu fördern, hat die Marriott School of Business eine von Wirtschaftsstudenten für Wirtschaftsstudenten geführte Zeitschrift mit dem Titel *Marriott Student Review (MSR)* sowie einen Business-Podcast mit dem Titel *Measuring Success Right (MSR)* gestartet. Ihre Erfahrungen spiegeln Kolbs Theoriezyklus des Erfahrungslernens (1984) und Mezirow's kritische Reflexion und transformatives Lernen (1990, 1998, 2000) wider, die die Standards für die Lehre des MSR-Kurses sind. Die reflektierenden Kommentare der Schüler wurden anhand von Morris' (2019) fünf Merkmalen konkreter Lernerfahrungen überprüft. Zusätzlich werden die Bewertungen der Studierenden des MSR-Studiengangs mit anderen betriebswirtschaftlichen Studiengängen verglichen. Diese Vergleiche veranschaulichen, wie Studierende Erfahrungslernkurse höher bewerten als Kurse, die überwiegend mit traditionellen Unterrichtstechniken durchgeführt werden. Da die Zeitschrift und der Podcast an Popularität gewonnen haben, haben die Studenten auch die Möglichkeit, ihre Schreib-, Redaktions- und Werbefähigkeiten zu verbessern und so das praktische Lernen für ihre zukünftige Karriere zu fördern.

**Schlüsselwörter:** Erfahrungslernen, Wirtschaftskommunikation, Hochschulbildung

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**Аннотация** (Марианна Ричардсон, Райан Стенквист, Дженифер Стенквист: Обучение «опытным» путем в бизнес-коммуникации: запуск рецензируемого студенческого журнала и подкаста): Дискуссии по поводу эффективности метода приобретения новых знаний на основе опыта для всех возрастных групп и ступеней обучения берут свое начало в классической греческой философии (см. Crosby, 1995; Stonehouse, Allison, & Carr, 2011) и не ослабевают до сих пор (Dewey, 1938; Kolb, 1984; Mezirow, 2000; Morris, 2019). Для того, чтобы данный метод обучения стал более активно использоваться в сфере деловой коммуникации, школа менеджмента Marriott инициировала создание журнала, который издается студентами-экономистами для своих коллег по учебе. Журнал называется «Marriott Student Review» (MSR). Одновременно был создан подкаст «Measuring Success Right» (MSR). Опыт студентов-издателей «привязан» к известным научным теориям – циклу Колба (1984) и концепции критической рефлексии и преобразующего обучения Д. Мезирова (1990, 1998, 2000). Эти научные идеи являются стандартами в преподавании соответствующих курсов. Отрефлексированные комментарии студентов были проверены научным путем – с помощью пяти критериев Морриса (2019), которые репрезентируют конкретный учебный опыт участников данного дискурса. В дополнение к этому было проведено сопоставление оценочных показателей, сформулированных студентами данного направления подготовки, с оценками, данными студентами других профилей обучения в области производственной экономики. Сравнительный анализ показал, что что студенты отдают предпочтение тем занятиям, на которых активно внедряется метод трансфера знания «опытным путем». Журнал и подкаст пользуются популярностью, они востребованы; работая над их выпуском, студенты получают возможность улучшить навыки академического письма, редакционной работы, компетенции, востребованные с сфере рекламного дискурса. Таким образом они формируют свой портфолио для будущей профессиональной карьеры.

**Ключевые слова:** обучение на основе опыта, экономическая коммуникация, высшее образование.

## Introduction

Ancient Greeks such as Plato, Socrates, and Aristotle realized the need for combining intellectual and theoretical learning with practical and real-world experiences (Stonehouse, Allison, & Carr, 2011; Warren, Sakofs, & Hunt, 1995). For example, in Plato's work *The Republic* (1987), he describes the need to combine man's philosophical pursuits with their physical counterparts. Plato's theory focuses on the fact that the true knowledge of absolutes, even things as simple as tables and chairs, is not achievable by most people because of the mind's limited capacity to learn from critical investigation (Crosby, 1995, 7). Plato's prized student, Socrates, encouraged the discovery of knowledge through questions and dialogue with other knowledge-seekers. Rather than focusing on the abstract concepts of forms and absolutes, Aristotle taught an organic approach to learning, stating that a life of pure theory and academics was not possible (Crosby, 1995, p. 9). He had his students learn through interactions with the world around them. Modern educational theorists continue to make similar pleas for the need of a more holistic and experiential view of education (McCord, Houseworth, & Michaelson, 2015).

In the early twentieth century, John Dewey (1938) wanted educators to allow the learners' impulse and interests to drive learning. More recently, Kolb's experiential learning cycle (1984) gave an experiential framework for educators to follow. Following up on Kolb's research, Morris (2019) conducted a literary review analyzing specific qualities needed for concrete learning experiences to be effective. Mezirow's (1995, 2000) concepts of critical reflection and transformative learning theory continued the charge for educators to strive for a better balance between student-led experiences and teacher-driven curricula. These experiential learning theories have been the framework for a university business management course based on concrete, real-world end products, specifically made for a national and international audience.

## John Dewey on Experience and Education

In the twentieth century, John Dewey (1938) wrote *Experience and Education*, which is arguably the most important document describing experiential learning. Dewey wrote this after his experience with the "laboratory school" of The University of Chicago where teachers observed rather than directed children's learning. Education in the 1930s gave "exalted labels to conflicting loyalties" (Dewey, 1938, p. 9) and educators became focused on the contentious labels of progressive and traditional education. Traditionalists or the traditional school used specific subjects and the cultural heritage of the past as the main subject matter of its content. "New" or progressive schools exalted the learner's impulse and interests and addressed the problems of a changing society. Dewey felt that neither side sufficiently educates an individual, but that both kinds of education are necessary; thus, the educational labels of traditional and progressive do not need to be viewed as exclusive. Instead, a true learning situation has longitudinal dimensions, which lead to and enlarge experiences, as well as lateral dimensions, which modify or modulate the learner's outlook. The contentious labels of traditional and progressive should be erased (Dewey, 1938, p. 21).

Dewey pointed out that progressives of his day preached education "of, by, and for experience" (Dewey, 1936, p. 29). Yet experience is not the end-all for educational purposes. Dewey charged educators to discover a theory of experience and put it into practice. A coherent theory of education will aid in the selection and organization of appropriate educational methods and materials. This is required for true experiential learning to occur. Dewey wrote: "Failure to develop a conception of organization upon the

empirical and experimental basis gives reactionaries too easy a victory” (Dewey, 1938, p. 31). In other words, educators must envision a concrete way to realize these concepts in the classroom.

## David Kolb – Experiential Learning Cycle

To answer Dewey’s requirement of a concrete vision for experiential learning, David Kolb (1984) put forth a curriculum model for educators to use. The four parts of the model were conceptualized as a cycle which would be repeated over and over again to reinforce learning. The parts include (1) a concrete experience, (2) reflective observations, (3) abstract conceptualization, and (4) active experimentation.

**Concrete Experience.** Kolb’s description of concrete experience is a team-driven task that involves active participation, a more hands-on approach than just watching, reading, or listening in a classroom. This concrete experience is usually new to students, which requires unfamiliar skills and knowledge.

**Reflective observation.** Given a task that they have never done before, students will often have lots of questions. At this point in the experiential learning cycle, there needs to be open communication within the team and with the teacher.

**Abstract Conceptualization.** In abstract conceptualization, the learner makes comparisons with what they have done before and reflects on how things are different or the same given this new activity. Reflection plays a major role in the learning process - during and after the task - in both Kolb’s cycle (1984) and in Mezirow’s transformative learning theory (2000). Reflection encourages metacognition, which means thinking about what you are thinking (Ellis, 2000), and critical reflection (Mezirow, 1998), which takes reflection a step further by forcing the learner to readjust what they thought they knew into a refreshed and new context.

**Active Experimentation.** Active experimentation is putting into practice what has been learned, often in a real-world context. As a student receives new understanding, he or she needs to translate this knowledge into other experiences (Roessger, 2014).

Thus, the experiential learning cycle continues. The knowledge acquired causes the learner to actively experiment with another concrete experience. This then brings about reflective observation to understand the task; abstract conceptualization to reflect upon learning in the past, present, and future; and finally, acute desire to actively experiment again.

## Morris and Concrete Learning Experience

Genuine education comes through experience, but all experiences are not genuine or equally educative. Some experiences are mis-educative—arresting or distorting the growth of future experience (Dewey, 1938, p. 25). My daughter Deborah’s first swimming lesson presents a prime example. As soon as her coach forced my daughter’s face under the water, she wanted out. She left the pool, put on her clothes, and refused to return. It took me a long time to get her into a swimming pool after that experience because she wasn’t given the chance to choose for herself to take that first, independent dunk of her head under the water. Turning to the classroom for a more common example, if a student feels that the learning process is boring, then the student associates learning with boredom.

Dewey (1938) explained that the quality of an experience has two aspects: (1) an immediate agreeable or disagreeable effect, and (2) an influence on later experience (p. 27). To understand experience, there must be an organic connection between education, personal experience, empirical thought, and exper-

imentation. The definition of a concrete learning experience is not self-explanatory but should be more deeply explored by educators to determine what activities in the classroom fit this criterion.

Morris (2019) agrees with the elements of Kolb's experiential learning cycle but is concerned with the lack of specificity about what constitutes a concrete learning experience. He conducted a literature review of 60 journal articles to explore the nature and treatment of concrete experiences. Morris (2019) defined five characteristics of concrete experiences that best fit the experiential learning construct:

1. Learners are active participants.
2. Knowledge of students is placed in time and place.
3. Learners experience new encounters with their learning.
4. Inquiry to real world problems becomes a part of the learning process.
5. Critical reflection is a critical part of learning.

Morris (2019) proposes a rewrite to Kolb's experiential learning cycle: "Experiential learning consists of *contextually rich* concrete experience, *critical* reflective observation, *contextual-specific* abstract conceptualization, and *pragmatic* active experimentation."

## Jack Mezirow – Transformative Learning Theory

Experience must also be evaluated on continuity, or the experiential continuum. Democratic and humane educational arrangements are better than those that are autocratic and harsh. This stems from Mezirow's belief that conferencing during the educational experience encourages a better quality of experience. Going deeper into the learning cycle means transforming ideas, actions, and traditions; it covers the formation of attitudes (emotional and intellectual) and basic sensitivities. Every experience both takes from experiences before and modifies the quality of experiences after and is a moving force in some direction.

Growth in and of itself is not enough because a person can grow physically, intellectually, and morally in the wrong direction. For example, a burglar can learn how to be a better burglar with every successful burglary. Dewey felt that experience should arouse curiosity and strengthen positive growth, which would then strengthen the fabric of a democratic society (Dewey, 1938, p. 50).

Transformative learning theory is for adult learning and utilizes disorienting dilemmas to challenge students' thinking, providing positive-growth experiences (Mezirow, 1998, 2000, 2009; Kreber, 2010). Students are then encouraged to use critical thinking and questioning to consider if their underlying assumptions and beliefs about the world are accurate (Clancy & Vince, 2019). Disorienting dilemmas often occur in the context of academic learning environments, as teachers provide space to critically engage with new ideas. As students collectively dialogue and engage with each other about their new perspectives, transformation can take place, especially if students act on their new skills and beliefs (McCord, Houseworth, & Michaelsen, 2015).

## Inspiring Learning

"Inspiring learning" has become the mantra for professors and administrators at Brigham Young University. In a speech to faculty and staff at the beginning of the 2016 academic year, President Kevin J. Worthen made a plea for faculty to start incorporating deeper and more experiential learning into their programs, pointing out that students cannot learn all they need to know by simply memorizing facts and discussing principles. He stressed: "Experience connects theory with application and deepens our

understanding of the principles and truths we learn” (Worthen, 2016). This initiative seeks to transform the BYU educational experience by providing students with life-changing learning opportunities beyond the classroom.

Throughout the campus, Inspiring Learning has become a brand for the university. Educators are encouraged to analyze what direction the scholastic experience in their classroom is headed for the student. At the university level, mature learners can exercise greater judgment and wisdom in broader learning situations rather than face the limits of firm external controls. Educational experiences should rest more on social contact and communication, which may mean a complete restructuring of courses and curricula. Worthen’s challenge to start programs beyond the classroom experience has brought about changes in the way traditional courses have been taught, encouraged more professor-led research, and increased student involvement in gathering data, going out into the field, writing, and presenting at conferences.

## Inspiring Learning in Business Communication

To promote Inspiring Learning in business communication, the Marriott School of Business started a peer-reviewed journal run by business students for business students entitled *Marriott Student Review* (MSR). The purpose of this publication, as defined by the student editorial board, is to connect the leaders of tomorrow with the issues of today. MSR is published through BePress, an academic publisher, and hosted through the Harold B. Lee Library website as part of ScholarsArchive, which includes a variety of professional and student academic journals published by BYU.

The MSR publication process starts with students submitting their articles through the online submission tab on the ScholarsArchive website. An editorial board of student reviewers evaluates the papers and sends remarks back to the authors. Submissions go through two peer reviews. At the end of the process, if all problems have been fixed by the writer, the paper is put in the queue for publication. MSR publishes issues three times a year, at the end of each semester (e.g., April, August, December), so the wait time for accepted articles to be published is usually three to four months.

Soon after the publication’s inception, the MSR editorial board realized that students want not only a well-written business journal, but also a well-designed publication. To accomplish this, business students recruited graphic design students to become a part of the editorial board. This inter-departmental collaboration enabled students to understand that business does not happen in a vacuum. Instead, people from a variety of disciplines need to work together for businesses to succeed. Now, the design team is part of the MSR editorial board. For each issue, this dynamic and diverse team determines the inclusion and order of articles, as well as the theme for the issue. For each article, designers try to incorporate the vision of the author, interviewing the author to understand their ideas on visuals and font type. These designs are similarly peer reviewed before publication.

As the journal has grown in popularity, the opportunities for students to increase their communication skills have grown, too. MSR now has a team of students advertising the journal through Facebook, LinkedIn, Instagram, Twitter, and Pinterest. Advertising and marketing students improve our SEO and boost posts, which has increased our readership remarkably. Currently, the editorial board is recruiting design, marketing, website, editing, videography, and photography students to help establish our brand personality.

## Exploring Other Communication Channels

The MSR board researched other business communication channels that students would be interested in following. The marketing team conducted an informal survey to determine where students prefer to consume business news and information. The study results indicated that most students turn to websites and podcasts, rather than published material (other than “forced” readings given by their university professors). Because of these survey results, our marketing students decided to explore other business communication platforms for the MSR brand. To start, our student-led web design team decided to develop a professional, visually interesting website to establish and increase online readership.

Additionally, MSR students launched a podcast series entitled *Measuring Success Right*, a continuation of the MSR brand. The podcast allows students the opportunity to conduct live interviews with well-established business professionals and well-known communicators, such as Hal Gregersen, Liz Wiseman, and Whitney Johnson. Our podcast is a weekly show, which offers students a platform to contact, invite, follow-up, and thank guests on a regular basis.

As a team, we also determined the importance of maintaining a consistent brand. Incorporating the ideas of our designers, editors, podcasters, and writers, we created a logo and style guide for Facebook, LinkedIn, Instagram, *Measuring Success Right*, and our website. This MSR brand consistency will encourage consumer awareness across all communication platforms. Every semester, students re-evaluate how the MSR brand is faring for both the journal and podcast, making any necessary changes to stay current with our business student and young executive audience.

## Implementing Kolb’s Experiential Learning Cycle

The accompanying course for *Marriott Student Review* is entitled “Writing for the Business Press” and includes undergraduate and graduate students. Each of the four parts of Kolb’s experiential learning cycle has been incorporated into the MSR curriculum.

**Concrete Experience.** Every semester, the main objective of the MSR class is to complete and publish an issue of *Marriott Student Review* and to post a weekly *Measuring Success Right* podcast. The marketing team bears responsibility for creative advertising on Facebook, Instagram, Twitter, and LinkedIn to promote more listeners and readers. Writing articles, producing podcasts, and marketing the publication all offer new and concrete learning experiences that students accomplish during the course.

**Reflective observation.** Students select their teams based on their interests, rather than assignment. Communication is generally very open within each team as they work to accomplish the team goals they set for the semester. Even though we have a classroom time and place, most of the work and learning takes place outside the classroom at the discretion of each individual and team. At this point in the experiential learning cycle, students often have many questions about how they are to accomplish these tasks. Typically, students need more than one semester to hone their respective writing, editing, marketing, and design skills, which is encouraged since this is a repeatable course.

**Abstract Conceptualization.** Reflection on the goals made at the beginning of the semester plays a major role in the learning process (Kolb, 1984; Lowe & Kerr, 1998; Mezirow, 1998; Morris, 2019). Each student submits a reflective paper within the first month of the course expressing their aims and ambitions. These will frequently change over time, since students often hope to accomplish more than they possibly can in the semester time frame.

**Active Experimentation.** At the end of the semester, each student writes a final reflective paper on their individual and team efforts to accomplish their goals, what they learned, and how they could do

better. The students also reflect on ways MSR can run more efficiently and increase readership and podcast following. Students take these new-found talents and bring them to new experiences after the course and into their business careers.

## The Power of Concrete Experience: From the Students' Perspective

The five characteristics of concrete experiences determined by Morris' (2019) study have also been included in the MSR curriculum. Student comments from the MSR team have been used below to illustrate the use of these characteristics in the course. Student permission was asked for before these comments were published. Also, names of the students have been omitted for student privacy. All student comments used in this paper were from the 2018-2019 school year.

During the semester, students are encouraged to express their thoughts and feelings about the MSR experience through reflective assignments. In their reflections, students have expressed their satisfaction with these experiential traits.

### **Active Participants.**

I was able to learn a lot as I worked on the website. I built a new site, [measuringsuccessright.com](http://measuringsuccessright.com), and updated it with the new podcasts that came out each week. It was a great experience and I'm happy that I was able to be a part of it!

### **Real Time Use of Knowledge.**

As a podcast host for the *Marriott Student Review*, I have continued to meet incredible businessmen and women who inspire me every day. From taking risks, to finding the endeavors I can be brave for, this experience has felt like a crash course in human optimism, resilience, and compassion.

### **New Encounters with Learning.**

MSR extends my talents and gives me a chance to be artistic in what is otherwise an objective curriculum.

### **Inquiry to Real World Problems.**

This term I wish I had more time to dedicate to MSR. I was able to record two podcasts and do some editing as well as contribute some ideas for the future of MSR, but I wasn't able to do as much as I had hoped. I am grateful for my team who put in hard work and edited and uploaded the recordings.

### **Critical Reflection.**

Being a part of MSR has helped me discover what I am passionate about and where I want to go with my future career.

Through this journey of Inspiring Learning in business communication, students learn not only to write, edit, and publish articles, but also to collaborate with a variety of peers in other disciplines.

## Mezirow's Transformative Learning

A student's experience with the MSR class consequently often results in a transformative learning experience. After joining the team, students face the unfamiliarity of hosting a podcast or writing in a peer-reviewed journal. This opportunity causes the student to critically reflect on their abilities to accomplish this new task. Often, the student realizes that he or she cannot accomplish this alone but must rely on the help and cooperation of others. At the end of the process, students can act on their newly acquired perspectives and abilities to help them become successful in the course and future similar experiences.

In one instance, an MSR student recently became the manager of the marketing team. She had never been a team leader and did not have experience with social media marketing. She wrote:

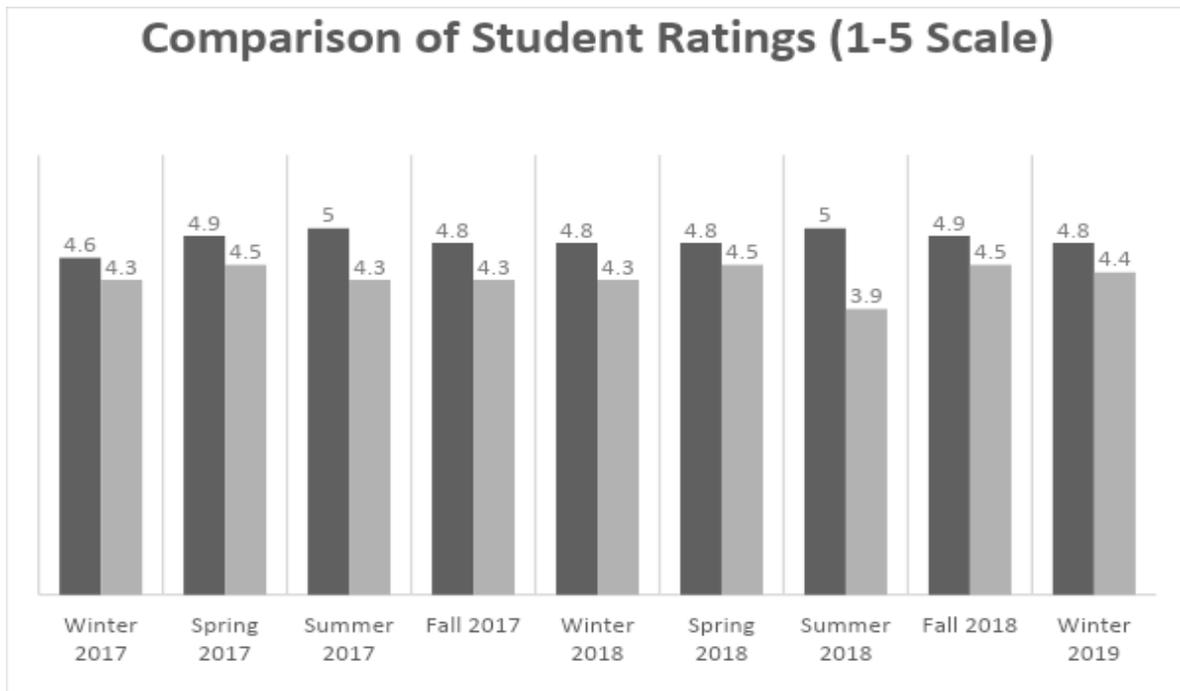
I feel that there is a lot of room for growth and development, and I look forward to contributing to the progress of the journal. This term, I am planning to work on the newly re-branded 'marketing' team, as the Marketing Team Coordinator. My role will be to organize the team, plan meetings, delegate assignments, follow-up on projects, and coordinate with other teams and the MSR leadership to keep our marketing on track. Within these team goals, individually, I hope to develop leadership skills, improve my communication skills, develop skills for planning and organizing team meetings, and learn how to keep a project fun and engaging for those involved while also helping them stay on task and reach their individual goals. I also hope to continue developing my understanding of the power of social media and how it can be a positive tool for spreading uplifting and meaningful content.

At the end of the semester, she had transformed in her abilities as a leader and social media marketer. Her comments reflect this change:

We had a lot of new members of the team, and it was a good learning experience working with them, helping them find roles on the team, and showing them the many great facets of being a part of MSR. Sometimes, it was tricky to get everyone together to coordinate our marketing plans, due to very different schedules and internships, but everyone on the team was willing to be flexible and help out when they could.... Overall, I feel that I learned a lot as a leader of the marketing team, especially about organization, communication, delegation, and knowing when and how to take the lead. It was a great opportunity and I am grateful for the team I was able to work with and the difference I feel we made as we promoted the powerful and uplifting content of MSR.

## Student Evaluations

Every semester, students rate their courses on a 1 – 5 scale, with 5 as the highest score. These course evaluations are made available to the course professor and university administration and are used to assess courses, curriculum, and professors' teaching performance.



The table above is a comparison of the student ratings for the MSR course (Series 1) compared to the management department average for all student rating scores (Series 2). The department average scores range from 3.9 – 4.5 with a mean score of 4.3, while the MSR average scores range from 4.6 – 5.0 with a mean score of 4.84. A t-test comparing these two sets of scores results in a p-value of 0.00015 illustrating a statistically significant difference between the department average student scores and the MSR student scores. One might suppose that the professor teaching the MSR course is simply a better teacher. I wish that were true, but alas, it is not. I teach other management courses in the department as well. In my traditional courses, my average student ratings are consistent with department averages in the 3.7 to 4.6 range with a mean score of 4.3, which is the same mean score as the department average. These comparisons illustrate how students rate experiential learning courses higher than traditional classes.

On the class rating web page, students may include anonymous comments. In these comments, students have observed that they like the real-world aspect of the experience and the permanence of contributing to a work that will not fade away at the end of the semester (Bradberry & De Maio, 2019). One student remarked: “Overall it has been a joy to work with so many people on the team.... The work we have done this semester will last for years.”

## Conclusion

At the university level, professors should encourage more cross-disciplinary and cross-curriculum activities for students, enabling them to experience a genuine experience that is not siloed into a single course or program (Gundala, Singh, & Cochran, 2018). Student satisfaction is also increased as they experience courses which practically prepare them for their future careers (Borredon, Deffayet, Baker, & Dolv, 2011). A senior business student remarked:

My first semester at the *Marriott Student Review* has been the highlight of my experience in the Marriott School of Business.... I consider working for MSR a once-in-a-lifetime opportunity that I am deeply grateful to have.

There is a palpable creative energy in the room as the editorial board organizes an MSR issue. Students are engaged and excited to work together. The teacher becomes a part of the team. Learning has gone beyond the classroom, causing a deeper impact in students' lives. However, experiential learning will not completely replace the need for classroom instruction. Formal learning is usually needed before experiential learning can take place. Only by combining formal learning with experiential learning will we help students create something original that requires unfamiliar skills and brings to the student a truly transformative learning experience.

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*Liz Ebersole (USA)*

# Preservice Teacher Experience with Technology Integration: How the Preservice Teacher's Efficacy in Technology Integration is Impacted by the Context of the Preservice Teacher Education Program

**Abstract:** This paper explores self-efficacy theory (Bandura), situated learning theory (Lave & Wenger), and self-determination theory (Ryan and Deci), the technological pedagogical content knowledge framework (TPCK or TPACK; Mishra & Koehler) and the International Society for Technology in Education (ISTE) Standards (for Educators) as they relate to the preservice teacher education program, including both coursework and field experience. Regarding teacher education program coursework, this paper examines research studies that report on findings from both quantitative and qualitative research about preservice teachers' experience with technology integration in the context of the teacher education program, in which the TPACK framework or ISTE Standards were used in the curricular design of the program's academic coursework. Regarding teacher education program field experience, this paper examines the context provided by the mentor teachers' self-efficacy regarding and use of technology.

**Keywords:** Self-Efficacy Theory, Self-Determination Theory, Situated Learning Theory, Community of Practice (CoP), Technological Pedagogical Content Knowledge (TPCK or TPACK), International Society for Technology in Education (ISTE) Standards

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**摘要** (Liz Ebersole: 在职前教师教育计划的背景下, 职前教师在技术融合方面的经验) :

本文探讨了自我效能理论 (Bandura), 情境学习理论 (Lave和Wenger), 自我决定理论 (Ryan和Deci), 技术教学内容知识框架 (TPCK或TPACK; Mishra&Koehler) 和国际教育技术协会 (ISTE) 标准 (针对教育工作者), 因为它们与职前教师教育计划有关, 包括课程工作以及实地经验。针对教师教育计划的课程工作, 本文分析了一些研究报告, 这些研究展示了在教师教育计划的背景下, 有关职前教师技术融合经验的定量和定性研究的一些成果, 其中在教师培训计划中使用了TPACK框架或ISTE标准。它们都曾被用于学术课程工作的课程设计当中。关于教师教育计划的实地经验, 本文考察了指导教师在使用技术方面的自我效能的实例。

**关键词:** 自我效能理论, 自我决定理论, 情境学习理论, 实践社区 (CoP), 技术教学内容知识 (TPCK或TPACK), 国际教育技术协会 (ISTE) 标准

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本文探讨了自我效能理论 (Bandura), 情境学习理论 (Lave和Wenger), 自我决定理论 (Ryan和Deci), 技术教学内容知识框架 (TPCK或TPACK; Mishra&Koehler) 和国际教育技术协会 (ISTE) 标准 (针对教育工作者), 因为它们与职前教师教育计划有关, 包括课程工作以及实地经验。针对教师教育计划的课程工作, 本文分析了一些研究报告, 这些研究展示了在教师教育计划的背景下, 有关职前教师技术融合经验的定量和定性研究的一些成果, 其中在教师培训计划中使用了TPACK框架或ISTE标准。它们都曾

被用於學術課程工作的課程設計當中。關於教師教育計劃的實地經驗，本文考察了指導教師在技術使用方面的自我效能的實例。

**關鍵詞：**自我效能理論，自我決定理論，情境學習理論，實踐社區 (CoP)，技術教學內容知識 (TPCK或TPACK)，國際教育技術協會 (ISTE) 標準

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**Zusammenfassung** (Liz Ebersole: Preservice Lehrer Erfahrung mit der Technologieintegration: Wie sich die Wirksamkeit von Preservice LehrerInnen bei der Technologieintegration durch den Kontext des Preservice Teacher Education Programms auswirkt): Dieses Papier untersucht die Selbstwirksamkeitstheorie (Bandura), die Theorie des situated learning (Lave & Wenger) und die Selbstbestimmungstheorie (Ryan & Deci), den technologisch-pädagogischen Wissensrahmen (TPCK oder TPACK; Mishra & Koehler) und die Standards der International Society for Technology in Education (ISTE) (für Pädagogen) in Bezug auf das Preservice Teacher Education Programm, einschließlich Kursarbeit und Praxiserfahrung. In Bezug auf die Lehrveranstaltungen für Lehrerausbildung untersucht dieses Papier Forschungsstudien, die über Ergebnisse aus der quantitativen und qualitativen Forschung über die Erfahrungen von Preservice LehrerInnen mit der Technologieintegration im Rahmen des Lehrerausbildungsprogramms berichten, in dem der TPACK-Rahmen oder die ISTE-Standards bei der curricularen Gestaltung der akademischen Studienarbeiten des Programms verwendet wurden. In Bezug auf die Felderfahrung des Lehrerbildungsprogramms untersucht dieses Papier den Kontext, der durch die Selbstwirksamkeit der MentorenlehrerInnen in Bezug auf Technologie und deren Einsatz gegeben ist.

**Schlüsselwörter:** Selbstwirksamkeitstheorie, Selbstbestimmungstheorie, Situated Learning Theory, Community of Practice (CoP), Technological Pedagogical Content Knowledge (TPCK oder TPACK), International Society for Technology in Education (ISTE) Standards

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**Аннотация** (Лиц Эберсоле: Опыт студентов педагогического факультета с технологической интеграцией): В данной статье дается анализ теории самоэффективности (Бандура), теории ситуативного обучения (Лейв, Венгер) и теории самодетерминации (Райан, Деси), рассматривается технологический контент обучения (Мишра, Келер) и стандарты международной ассоциации по развитию информационных технологий в образовании (ISTE), включая теоретическую и практическую части. Применительно к занятиям, которые проводятся при подготовке будущих учителей, в работе анализируются результаты исследований, в которых в свою очередь в количественном и качественном аспектах рассматривались оценочные показатели самих участников данных курсов с интегрированием в процесс подготовки информационных технологий. В рамках этих подготовительных курсов использовались стандарты профессиональной подготовки учителей ISTE и TRACK. В статье анализируется также контекст, заданный через самоэффективность будущих наставников с проекцией на информационные технологии и их эффективное использование.

**Ключевые слова:** теория самоэффективности, теория самодетерминации, сообщество практики, концепция технологического педагогического контента знаний, международная ассоциация по развитию информационных технологий в образовании

## Introduction

The teacher education program serves as the gateway to the larger community of practice (CoP) for preservice teachers. It is here that their preconceived ideas about teaching, established through preservice teachers' own experiences in K-12 education, are confirmed and extended or challenged and reformed. Regarding technology integration, each preservice teacher will enter the teacher education program having had unique experiences with technology integration in their K-12 schooling, as a result of their own teachers' efficacy and use, as well as their own independent use of technology for academic

purposes. Opportunities for learning about technology integration during the preservice teacher education program are to a certain extent governed by the context provided by the college or university (access to tools and courses) and the faculty (self-efficacy, quality and frequency of use) (Foulger & Williams, 2007; Keeler, 2008; Sutton, 2011; Lewis, 2015; Hughes, Liu, & Lim, 2016). How then, or to what extent, does the context of the preservice teacher program enhance or diminish the preservice teacher's self-efficacy and self-determination regarding technology integration?

As part of the teacher education program, the preservice field experience, in which preservice teachers gain practical experience in real classrooms, also provides a context that may either enhance or diminish the preservice teacher's self efficacy regarding technology integration. The preservice teacher observes the mentor teacher in the context of the classroom and school environment, including the daily skills, habits and mannerisms required to be as successful teacher. Regarding technology integration, there may or may not be dissonance between what preservice teachers observe in their preservice field experience and what they have learned in their academic program, or they may or may not have an opportunity to employ practices they have acquired in their academic program during their field experience. According to Ertmer & Ottenbreit-Leftwich (2010), "although knowledge of technology is necessary, it is not enough if teachers do not also feel confident using that knowledge to facilitate student learning" (p. 261). How then, does the context of the preservice field experience, including the mentor teacher and the classroom and school environment, affect the preservice teacher's self-efficacy regarding technology integration?

## Theoretical Construct

### *Self-Efficacy Theory*

According to Albert Bandura (1995), "perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations. Efficacy beliefs influence how people think, feel, motivate themselves, and act" (p. 2). During the teacher education program experience, preservice teachers are working towards competency and building confidence in their ability to become masters of content and pedagogy. Bandura (1995) wrote that an "influential way of creating and strengthening efficacy beliefs is through the vicarious experiences provided by social models" (p. 3). He explained that when "people [witness other people] similar to themselves succeed by perseverant effort [it] raises observers' beliefs that they, too, possess the capabilities to master comparable activities" (ibid.). Ertmer (2005) noted that

having access to multiple models increases both the amount of information available about how to accomplish the performance and the probability that observers will perceive themselves as similar to at least one of the models, thus increasing their confidence for also performing successfully (p. 33).

The faculty of the teacher education program, (many of whom are former classroom teachers), as well as the preservice field experience mentor teacher, are "social models" who embody the "who" that the preservice teacher is striving to become (Bandura, 1995; Ertmer, 2005).

Regarding the influence of "social models," Bandura (1995) wrote:

Modeling influences do more than simply provide a social standard against which to judge one's own capabilities. People seek proficient models who possess the competencies to which they aspire. Through their behavior and expressed ways of thinking, competent models transmit

knowledge and teach observers effective skills and strategies for managing environmental demands. Acquisition of better means raises perceived self-efficacy. Undaunted attitudes exhibited by perseverant models as they cope with obstacles repeatedly thrown in their path can be more enabling to others than the particular skills being modeled. (p. 4)

Preservice teachers' perceptions of self-efficacy may be significantly affected by their preservice learning experiences, including the competencies learned by observing the faculty in the teacher education programs and the mentor teachers in their preservice field experiences (Ertmer, 2005). On the connection between self-efficacy and technology integration, Ottenbreit-Leftwich, et al. (2018) wrote:

Because self-efficacy represents a critical factor in pre-service teachers' intention to integrate technology, it is important to develop not only technology integration skills and knowledge during teacher education programs, but also to alleviate pre-service teachers' concerns and develop their feelings of self-efficacy. One method for doing this is through cases or vicarious experiences, which can build the observer's confidence and control, reduce anxiety and increase self-efficacy with a particular task (p. 2).

Regarding innovation, Bandura (1995) emphasizes that "innovative achievements also require a resilient sense of efficacy. Innovations demand heavy investment of effort over a long period with uncertain results" (p. 13). Therefore, preservice teachers may benefit from a teacher education program and field experience in which the faculty and the mentor teacher incorporate innovative uses of technology in their classroom practice and who exhibit a resilient sense of efficacy when faced with the challenges that are inherent to both innovation and technology use in the classroom (Ertmer, 2005).

### *Situated Cognition/Contextual Learning Theory*

127

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Lave & Wenger (1991) wrote that "learning viewed as situated activity has as its central defining characteristic a process we call *legitimate peripheral participation*," and they explained that "learners inevitably participate in communities of practitioners" and the learners' "intentions to learn are engaged and the meaning of learning is configured through the process of becoming a full participant in a sociocultural practice" (p. 38). Merriam (2017) noted that "[situated learning] theory posits that the particular learning that takes place is a function of three factors in the context where it occurs: the people in the context, the tools at hand (tools can be objects like a whiteboard, language, or symbols), and the particular activity itself" (p. 88). Access to tools is an important consideration for preservice members of a community of practice. Lave & Wenger (1991) wrote that "control and selection, as well as the need for access, are inherent in communities of practice;" they also noted that "depending on the organization of access, legitimate peripherality can either promote or prevent legitimate participation" (Lave & Wenger, 1991, p. 103).

Sutton (2011), supported this idea with respect to preservice teachers:

In order for preservice teachers to see a connection between the words and actions of university faculty regarding the importance of technology integration, in order for them to see the relevance of technological skills to their content areas, and in order for them to have sufficient time to retain and reflect on the technology skills they have been exposed to, they need to be provided with authentic learning experiences using technology throughout their teacher preparation program. (p. 44)

During their coursework and field experience, the preservice teacher is in the process of becoming a member of the existing community of practice, which includes the teacher education program faculty,

the field experience mentor teacher, other preservice teacher candidates and educators, and the classroom and school environments, including the tools that they have access to in these environments. Therefore, preservice teachers may benefit from a teacher education program that allows for legitimate peripheral participation in an authentic context with master practitioners (faculty and inservice teacher mentors) who model technology integration and permit preservice teachers to use the technologies that they may encounter as inservice teachers.

## Self-Determination Theory (SDT)

### *Cognitive evaluation theory (CET).*

Ryan & Deci (2017) wrote that “cognitive evaluation theory (CET) represents a formal mini-theory developed within SDT that focuses on factors that facilitate or undermine intrinsic motivation” and, they continued, “in its most general form, CET argues that events that negatively affect a person’s experience of autonomy or competence will diminish intrinsic motivation, whereas events that support perceptions of autonomy and competence will enhance intrinsic motivation” (p. 124).

Regarding preservice teacher education, Lewis (2015) posited that “understanding what motivates preservice teachers to begin integrating standards-based technology into their lesson planning will aid teacher educators in determining the best approach to convey this information during teacher preparation programs” (p. 236). While Polly, Mims, Shepherd, & Inan (2010) reported that

preservice teachers who observed and experienced technology integration in their field experiences reported more positive attitudes towards technology... more frequent use of technology (...) and more instances of preservice teachers teaching with technology to support learning (p. 866).

During the teacher education program (coursework and field experience), the preservice teacher may have experiences that either facilitate or undermine their intrinsic motivation to be an innovative user of technology. Therefore, preservice teachers may benefit from a teacher education program that proactively seeks to build their competence in technology integration.

## Frameworks

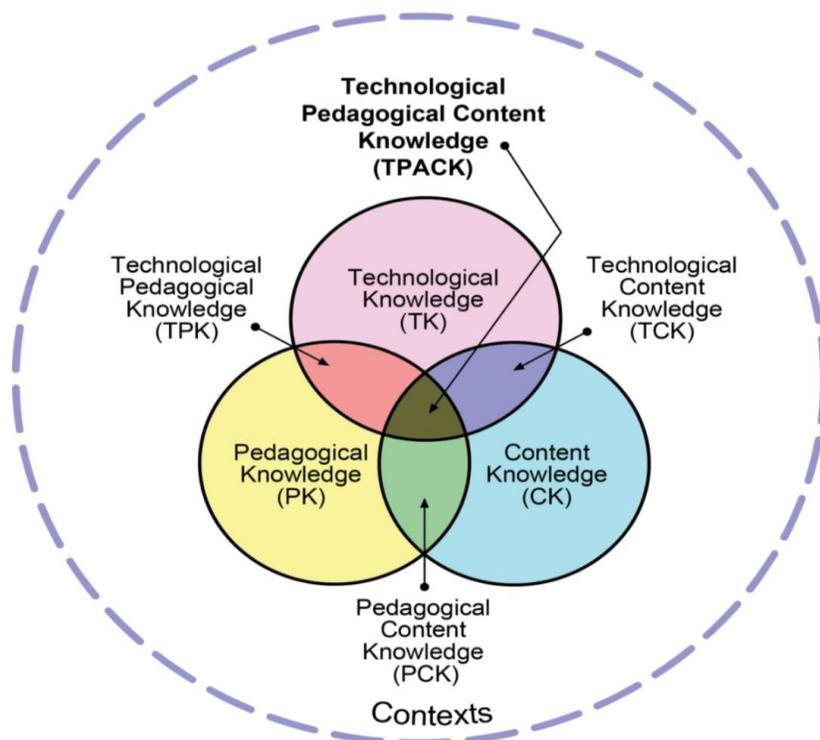
### *Technological Pedagogical Content Knowledge (TPCK or TPACK)*

According to Mishra & Koehler (2006), “thoughtful pedagogical uses of technology require the development of a complex, situated form of knowledge that we call Technological Pedagogical Content Knowledge (TPCK)” (p. 1017). TPCK (or TPACK) expands on the work of Shulman (1986, 1987) which linked pedagogical knowledge (the *how*) to content knowledge (the *what*) in teacher education (Mishra & Koehler, 2006). As a result of Shulman’s (1986; 1987) research, the PCK of TPCK was accepted as a necessary reform in teacher education (Mishra & Koehler, 2006). Mishra & Koehler (2006) note that, “Shulman did not discuss technology and its relationship to pedagogy and content,” but posit that it is not because Shulman “considered [the issue of technology] unimportant,” only that, at the time, “most technologies used in classrooms had become commonplace and were not even regarded as technologies” (p. 1023). What is important to note is that “prior to Shulman’s seminal work on PCK,” content

knowledge and pedagogical knowledge were taught as separate courses of study, similar to how technological knowledge is treated today (Mishra & Koehler, 2006, p. 1024).

According to Mishra & Koehler (2006), the TPACK framework “emphasizes the connections, interactions, affordances, and constraints between and among content, pedagogy, and technology,” and emphasizes that “knowledge about content (C), pedagogy (P), and technology (T) is central for developing good teaching,” while most importantly, “rather than treating these as separate bodies of knowledge, this model additionally emphasizes the complex interplay of these three bodies of knowledge” (p. 1025).

Mishra & Koehler (2006) defined Technological Pedagogical Knowledge (TPK) as “knowledge of the existence, components, and capabilities of various technologies as they are used in teaching and learning settings, and conversely, knowing how teaching might change as the result of using particular technologies” (p. 1028). Technological Content Knowledge (TCK) is defined as “knowledge about the manner in which technology and content are reciprocally related” (Mishra & Koehler, 2006, p. 1028). Finally, Technological Pedagogical Content Knowledge (TPCK) is defined as “an emergent form of knowledge that goes beyond all three components (content, pedagogy, and technology)” and that requires an understanding of how technology is seamlessly infused in each of the components (Mishra & Koehler, 2006, pp. 1028-1029). Figure 1 illustrates the relationship between the three components that comprise the TPACK framework: technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK) (tpack.org, 2012).



**Figure 1.** Technological Pedagogical Content Knowledge (TPACK) framework. Reproduced with permission of the publisher, © 2012 tpack.org.

The Council for the Accreditation of Educator Preparation (CAEP; 2019) appears to acknowledge and perhaps support TPACK in Accreditation Standard 3.4: “Providers present multiple forms of evidence to indicate candidates’ developing content knowledge, pedagogical content knowledge, pedagogical skills, and the integration of technology in all of these domains” (CAEP Accreditation Standards, Appendix A).

Mishra & Koehler (2006) wrote about the connection between the TPACK framework and situated learning theory and how it has influenced curriculum design, through an approach called “*learning technology by design*” (p. 1034). The researchers noted that “learning is best supported when the content is part of a context that the students can perceive as meaningful, assign value to the subject matter, and develop an understanding of the relation of it with their lives” (ibid.).

A few researchers have pointed out shortcomings of the TPACK framework. Archambault & Barnett (2010) noted that

there is confusion among the field of educational technology, not only concerning the definitions, but also the specific activities and methods to develop TPACK. This makes it difficult to implement knowledge from a framework that is yet to be fully defined, which limits its practical application (p. 1661).

Graham (2011) acknowledged that

a strong TPACK framework can (...) provide theoretical guidance for how teacher education programs might approach training candidates who can use technology in content-specific as well as general ways,” but Graham also noted that, “in order for that potential to be realized, researchers must work together to shore up weaknesses in the clarity of TPACK construct definitions and in articulating ways that the constructs are related to each other (p. 1959).

Despite the possible limitations of the TPACK framework, Archambault & Barnett (2010) and Graham (2011) suggest that rather than abandoning the framework, more research is needed for clarity and practical application.

## International Society for Technology in Education (ISTE) Standards

ISTE (2019) describes the ISTE Standards as “a framework for students, educators, administrators, coaches and computer science educators to rethink education and create innovative learning environments.” The ISTE Standards for Educators, which were first published in 2000 and revised in 2007 and 2017 provide two essential identities, “Empowered Professional” and “Learning Catalyst,” and seven roles: 1) “Learner;” 2) “Leader;” 3) “Citizen;” 4) “Collaborator;” 5) “Designer;” 6) “Facilitator;” 7) “Analyst” (ISTE 2017). Each role has several indicators (standards/conditions) that must be met. Furthermore, ISTE (2019) describes the ISTE Essential Conditions as “14 critical elements necessary to effectively leverage technology for learning,” which “offer educators and school leaders a research-backed framework to guide implementation of the ISTE Standards, tech planning and systemwide change.”

It is important to note that ISTE (2019) has evidence that all states in the United States use some version of the ISTE Standards to inform their technology standards frameworks and that several states in the United States have adopted the ISTE Standards for Students as their core technology standards. This makes the ISTE Standards relevant to teacher education programs in the United States. According to Lewis (2015):

Professional competency standards for teachers exist to create consistency and accountability in PK-12 education throughout the United States. Standards exist for all content areas, and in the last decade and a half technology standards have also been established not only by state departments of education across the nation but also by professional organizations such as the International Society for Technology in Education (ISTE). (p. 235)

Furthermore, the CAEP (2019) Accreditation Standards include the following references to technology standards:

- Standard 1.5:  
Providers ensure that candidates model and apply technology standards as they design, implement and assess learning experiences to engage students and improve learning; and enrich professional practice.
- Standard 2.3:  
Clinical experiences, including technology-enhanced learning opportunities, are structured to have multiple performance-based assessments at key points within the program to demonstrate candidates' development of the knowledge, skills, and professional dispositions, as delineated in Standard 1, that are associated with a positive impact on the learning and development of all P-12 students.

In the literature, Simsek & Yazar (2016) successfully validated the "education technology standards self-efficacy (ETSSE) scale, which was based on the ISTE Standards-T [standards for teachers]," and involved preservice teachers as participants in the validation study (p. 311-312). This demonstrates that researchers are making the connection between the integration of technology standards in preservice teacher education programs and possible implications for preservice teachers' self-efficacy with regards to technology integration. However, the following year, ISTE "released an updated version of the [standards for teachers]," renaming them to "ISTE Standards for Educators" and completely revising the indicators (Smith, 2017). Therefore, the scale developed by Simsek and Yazar (2016) may need revision and revalidation. A search of Education Source and ERIC via EBSCOhost did not yield any evidence that this has been done.

## Literature Review

A literature search was performed in Education Source and ERIC via EBSCOHost using the search terms "technological pedagogical content knowledge" or "TPACK" and "preservice teacher education." Two further search terms, "preservice field experience" and "mentor teacher" were added to isolate research focused on the context of the preservice field experience. The search was limited to peer reviewed academic journal articles published in English between 2010 and 2019 for which full text was readily available.

A second literature search was performed in Education Source and ERIC via EBSCOHost using the search terms "ISTE Standards" and "preservice teacher education." Two further search terms, "preservice field experience" and "mentor teacher" were added to isolate research focused on the context of the preservice field experience. The search was limited to peer reviewed academic journal articles published in English between 2010 and 2019 for which full text was readily available.

## Empirical Findings

### *Technological Pedagogical Content Knowledge Development (TPCK or TPACK)*

Abbitt (2011) performed a study involving preservice teachers who were enrolled in an early childhood education (ECE) teacher education program. The purpose of the study was “to explore the relationship between preservice teachers’ perceived knowledge and self-efficacy beliefs” (p. 135). All of the study participants were “enrolled in a one-credit course focusing on technology integration” that was “designed to improve preservice teachers’ technology skills and demonstrate technology-enhanced approaches to teaching” (Abbitt, 2011, p. 137). Abbitt (2011) noted that the study took place during the “final semester of coursework prior to a 16-week teaching internship and completion of the ECE program” (p. 137). Two previously validated survey instruments were used: 1. Survey of Preservice Teachers’ Knowledge of Teaching and Technology (Schmidt et al., 2009); 2. Computer Technology Integration Survey (Wang et al., 2004; Abbitt, 2011, p. 137).

Abbitt (2011) found that

within the sample, self-efficacy beliefs about technology integration are more strongly related to the specific knowledge domains where technology is blended with pedagogy and content knowledge (TPK, TCK, TPCK) than they are to the general knowledge about pedagogy (PK) or content-area knowledge (CK) (p. 140).

Abbitt (2011) concluded that, “as preservice teachers develop a more complex view of the role of technology in education, it follows that their needs for supporting technology skills evolve as well,” and that “an approach that provides multiple opportunities to develop technology skills throughout their teacher preparation program may provide the necessary scaffolds to develop a rich knowledge base and self-efficacy beliefs about technology integration” (p. 141).

Buss, Wetzel, Foulger, & Lindsey (2015) performed a study involving preservice teachers who were enrolled in the teacher education program at a university in Arizona that was undergoing a program overhaul regarding the program’s approach to technology integration. The purpose of the study was “to describe and measure the effectiveness of a new integrative approach in which learning to use technology is infused into methods courses” when compared with “a traditional, stand-alone [technology] course” (p. 160). As part of their required coursework, study participants were enrolled in either a stand-alone educational technology course or technology-infused methods courses, depending on their stage in the program (Buss et al., 2015, p. 162). The researchers used a mixed-method design, including a 53-item previously validated survey instrument (based on the work of Schmidt, et al., 2009) and follow-up focus group interviews (Buss et al., 2015, p. 163).

Buss et al. (2015) found that the participants’ “posttest quantitative TPACK scores all increased as compared to the pretest scores” and “the effect sizes for the pre- to posttest changes were quite large, indicating the effects were meaningful and not merely due to the large sample size” (p. 168). Furthermore, the researchers noted that “the qualitative data indicate the majority of candidates believed they were better able to integrate technology, that is, utilize TPACK knowledge domains, based on their preparation in the courses” (Buss et al., 2015). These findings point to the application of the TPACK framework as a method for increasing preservice teachers’ self-efficacy, as well as self-determination, in integrating technology. These findings also highlight the importance of this learning taking place in

the situated context of the teacher education program, within a community of practice that includes knowledgeable faculty who provide “strategies to facilitate candidates’ TPACK learning” (p. 168). Furthermore, the interaction effects noted by Buss et al. (2015) may indicate that the TPACK of the faculty (the teachers of the technology-infused courses) is an important factor that needs to be considered when applying the TPACK framework to teacher education program curriculum (p. 168). Professional development may be necessary to prepare the teacher education program faculty so that they are best able to model technology use within the context of the content and pedagogy coursework and engage preservice teachers with “hands-on opportunities” with technology (Buss et al., 2015, p. 168, pp. 170-171).

Shinas, Karchmer-Klein, Mouza, Yilmaz-Ozden, & Glutting (2015) performed a study involving preservice teachers who were enrolled in a teacher education program at a “large university in the Mid-Atlantic region of the United States” (p. 50). The purpose of the study was “to examine the technological pedagogical content knowledge (TPACK) development” and, in particular, the “unique contributions of TK, PK, and TPK in the development of TPACK” in the preservice teachers as a result of their teacher education program coursework (Shinas et al., 2015, pp. 47-49). As part of their required coursework, the participants had completed: 1) a one-credit course, “Educational Technology Professional Tools,” which introduces students to a variety of technologies, and 2) a two-credit course, “Integrating Technology in Education,” which is taken at the same time as methods coursework and field experience, and features “structured course content around the TPACK domains with explicit attention to the interactions among technology, content, and pedagogy” (Shinas et al., 2015, p. 50). The researchers used a previously validated survey instrument, the Survey of Preservice Teachers’ Knowledge of Teaching and Technology (Schmidt et al., 2009; Shinas et al., 2015, p. 50).

Shinas et al. (2015) reported that the findings in this study “[provide] evidence that building preservice teachers’ TK, PK, and TPK influences their overall TPACK development” (p. 53). Furthermore, the researchers noted that “this research suggests PK is foundational to TPACK development among preservice teachers,” and the finding that “TPK made the largest impact to TPACK... suggests that preservice teachers must learn to recognize technology not as an isolated construct, but as a critical component of effective teaching and learning” (Shinas et al., 2015, p. 53). Finally, the researchers noted that the findings in this study “reinforce the value of educational technology coursework in supporting preservice teachers’ development of TPACK when offered along with opportunities to build knowledge of pedagogy within authentic settings” (Shinas et al., 2015, p. 53).

### *International Society for Technology in Education (ISTE)*

Sutton (2011) performed a study involving preservice teachers who had graduated from “a post-baccalaureate, fifth-year teacher preparation program... at a large RU/VH university in the southeastern United States” and who were, at the time of the study, employed as classroom teachers (p. 40). The purpose of the study was to: 1) “identify and analyze the preservice technology training experiences of novice teachers;” 2) “determine which of these experiences novice teachers found to be ‘relevant and useful’ or ‘not relevant and useful’” 3) examine “novice teachers’ perceptions of how well their teacher preparation program equipped them with the knowledge and skills necessary to fulfill the National Educational Technology Standards for Teachers (NETS-T);” and 4) “develop themes regarding what constitutes relevant and useful technology training experiences for preservice teachers” (Sutton, 2011, p. 39). As part of their required coursework, the participants had completed a standalone technology course that was aligned with the NETS-T (ibid., p. 40-41). The researcher used qualitative methods,

including conducting interviews with the novice teachers, examining documents related to the stand-alone technology course, and writing “reflective field notes” (ibid., p. 41).

Sutton (2011) identified three major themes: 1) “a disconnect between preservice teachers’ technology training and other aspects of their professional education;” 2) “a lack of content-area relevance;” and 3) “inadequate retention and transfer” (p. 43). Regarding the first theme, “disconnect,” the researcher reported that the novice teacher participants “were not able to see many connections between their one required technology course and the teaching theories and methods that they were learning in their other courses” (ibid.). Regarding the second theme, “relevance,” the researcher reported that “the most striking report from these novice teachers was that during their university studies, they rarely had the opportunity to experience, as learners, the particular ways that technology could enhance instruction in the content areas that they would later be teaching” (Sutton, 2011, p. 44). Regarding the third theme, “retention and transfer,” the researcher reported that “these teachers said they would have liked to have seen these technology standards incorporated into all of their courses so that they could have gradually built confidence in their ability to implement the standards” (ibid.). He noted several implications, including that “the faculty who instruct preservice teachers must be qualified to demonstrate and model the vision of technology integration that they promote” and connected authentic learning experiences throughout the teacher education program to preservice teachers’ ability to “retain and transfer the knowledge and skills they have gained in regard to technology integration” when they become classroom teachers (ibid, p. 44).

## Discussion

All of the studies examined in this paper were able to demonstrate that the context of the teacher education program has an effect on the preservice teacher’s sense of self-efficacy and/or self-determination regarding technology integration.

### *Limitations of These Studies*

Abbitt (2011) noted that limitations of his study included small sample size and lack of diversity of participants. The researcher reported, “although these results may be representative of this cohort group, the ability to generalize these results to more diverse student populations, over longer time periods, or other contexts may be limited,” and he also noted a limitation in the use of self-reporting by participants, which “represent[s] perceptions of knowledge and beliefs rather than evidence of demonstrated knowledge and ability” (p. 140). Another limitation not noted by Abbitt (2011) is that there was no control group in the study, which presents threats to internal validity (Campbell & Stanley, 1963).

Buss et al. (2015) noted, “a limitation of the study is its total reliance on self-report data before implementation of full-fledged TI experiences in various types of classroom experiences” (p. 171). Similarly, Shinas et al. (2015) noted that limitations of their study include “the use of a self-report survey,” that “data were analyzed according to domains identified by the authors in a single study,” and that “all participants were from the same setting and were completing the same teacher preparation program” (p. 53). Another possible limitation is that two of the researchers in Shinas et al. (2015) were also the teachers of the course from which participants were selected.

Sutton (2011) reported that “the findings from this study cannot be generalized and may not produce similar results at other universities” (p. 45).

## *Suggestions for Future Study*

Buss et al. (2015) posed a question for future research: “What happens to TPACK scores when teacher candidates are required to employ TI in their practicum or field experiences, student teaching experiences, and after graduation in their own classrooms” (p. 171).

The preservice teachers in Shinas et al. (2015) were required to apply their learning about technology integration in their preservice field experience, which in this study was happening at the same time as the coursework. However, the researchers pointed out that “although [their] findings were statistically significant, it cannot be determined whether these can be generalized to a greater population” (Shinas et al., 2015, p. 53). Further quantitative studies are needed in order to strengthen these results. Also, as with Buss et al., it is not known whether the preservice teachers sustained their efficacy in technology integration when they became practicing teachers. Further research is needed to determine whether the self-efficacy in technology integration gained through experiences in the preservice teacher education program is sustained throughout the teacher’s career in education.

Sutton (2011) made the following recommendations for future research: 1) a “replication of [the researcher’s] study at the state or national level;” 2) to “expand [the researcher’s] study by interviewing the designated technology teachers from each school and/or the technology coordinators to see what types of technology training experiences they believe preservice teachers need;” and 3) research “on how university faculty are using technology in their own teaching and to what extent these uses align with the NETS•T [now the ISTE Standards for Educators]” (p. 46; ISTE, 2019).

## Conclusion

The proliferation of technology and the rate at which new uses in K-12 education emerge has created a new context which requires practicing teachers “to do more than simply learn to use currently available tools; they also will have to learn new techniques and skills as current technologies become obsolete” which “is a very different context from earlier conceptualizations of teacher knowledge, in which technologies were standardized and relatively stable” (Mishra & Koehler, 2006, p. 1023). The implication for teacher education programs is that “knowledge of technology” has become “an important aspect of overall teacher knowledge” (ibid, p. 1024).

The teacher education program presents the context in which the preservice teacher should encounter technology in conjunction with the pedagogical and content knowledge they need to master in order to eventually become innovative members of the larger community of practicing teachers. Mishra & Koehler (2006) noted that “the rich, complex, and situated perspective that we and others have been arguing for clearly requires the development of very different strategies for developing teachers (p. 1033). Teacher education programs need to “not only [show] how to use technology effectively in the classroom, but also [require] students to explore, create, and plan with technology, both prior to and during their field experiences” (Lewis, 2015, p. 238).

In the vision statement of its “Advancing Educational Technology in Teacher Preparation: Policy Brief,” the U.S. Department of Education (2016) stated:

Faculty at schools of education across the country should operate with a common language and set of expectations for effective and active use of technology in Prekindergarten-grade 12 (P-12) and at postsecondary education levels. Further, schools of education should work with P-12 schools and school districts to provide meaningful opportunities for pre-service teachers, in-service teachers, school and district leadership and faculty to co-learn and collaborate to better

understand and use technology as a tool to transform teaching and learning experiences for learners of all ages. (p. 4)

This vision statement calls on the community of educator practitioners (teacher education programs, districts, schools) to address the need for legitimate peripheral participation among its members, both preservice and inservice, to ensure all members are prepared to “effectively select, evaluate, and use appropriate technologies and resources to create experiences that advance student engagement and learning” (U.S. Department of Education, 2016, p. 4).

As more teacher education programs grapple with how best to prepare preservice teachers to successfully integrate technology in their future classrooms, further research is needed about whether and how self-efficacy theory, situated learning theory and self-determination theory, as well as the TPACK framework and ISTE Standards can be applied to program redesign.

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Eric E. Howe (USA)

## Does Metacognitive Reflection Benefit Art Students?

**Abstract:** The study of art, especially perspective, involves the use of specialized vocabulary words which can be difficult to learn. Metacognitive reflection (MR) offers a method to improve student learning of academic language. Teacher feedback on students' reflections provides additional benefits. This quasi-experimental study measured the influence of MR and teacher feedback on students' ability to learn and retain academic language. This study was conducted three separate times, to improve validity. While the MR treatment groups attained and maintained greater mean gains overall, post-hoc tests revealed that differences between groups in two of three studies were not statistically significant. The groups who engaged in reflection with feedback added a weighted mean gain of  $d = .37$  to their posttest score beyond that of the comparison groups. This finding provides moderate evidence for the efficacy of practicing reflection with feedback.

**Keywords:** metacognition, academic language, reflection, teacher feedback, visual arts

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**摘要** (Eric E. Howe: 元认知反射对艺术专业的学生有利吗?): 对艺术的学习, 尤其是对视角的研究, 包含可能难以学习的一些专业汇词的使用。元认知反射 (MR) 提供了一种改善学生学习术语的方法。老师对学生思考的反馈提供了附加的好处。这项准实验研究测量了 MR 和老师反馈对学生学习和保留术语能力的影响。这项研究涉及了三个不同的时间, 以提高有效性。虽然 MR 治疗组总体上获得并保持了更大的平均收益, 但事后的测试显示, 三项研究中的两项在各组之间的差异上不具备统计学意义。参与反馈的小组在测试后的评分中增加了  $d = 0.37$  的加权平均收益, 这超过了其他小组。这一发现为使用反馈进行反思的有效性提供了适度的证据。

**关键词:** 元认知, 术语, 反思, 教师反馈, 视觉艺术

**摘要** (Eric E. Howe: 元认知反射对艺术专业的学生有利吗?): 对艺术的学习, 尤其是对视角的研究, 包含可能难以学习的一些专业汇词的使用。元认知反射 (MR) 提供了一种改善学生学习术语的方法。老师对学生思考的反馈提供了附加的好处。这项准实验研究测量了 MR 和老师反馈对学生学习和保留术语能力的影响。这项研究涉及了三个不同的时间, 以提高有效性。虽然 MR 治疗组总体上获得并保持了更大的平均收益, 但事后的测试显示, 三项研究中的两项在各组之间的差异上不具备统计学意义。参与反馈的小组在测试后的评分中增加了  $d = 0.37$  的加权平均收益, 这超过了其他小组。这一发现为使用反馈进行反思的有效性提供了适度的证据。

**关键词:** 元认知, 术语, 反思, 教师反馈, 视觉艺术

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**Zusammenfassung** (Eric E. Howe: Nutzt die metakognitive Reflexion den KunststudentInnen?): Ein Studium der Kunst, insbesondere der Perspektive, beinhaltet die Verwendung von Fachwörtern, die schwer zu erlernen sein können. Metacognitive Reflexion (MR) bietet eine Methode zur Verbesserung des Lernens von Studierenden in der akademischen Sprache. Das Feedback der Lehrkräfte zu den Reflexionen der Schüler bietet zusätzlichen Nutzen. Diese quasi-experimentelle Studie misst den Einfluss von MR und Lehrer-Feedback auf die Fähigkeit der Schüler, akademische Sprache zu erlernen und zu bewahren. Diese Studie wurde dreimal durchgeführt, um die Validität zu verbessern. Während die MR-Handlungsgruppen insgesamt höhere mittlere Zuwächse erzielten und aufrechterhielten, zeigten Post-Hoc-Tests, dass die Unterschiede zwischen den Gruppen in zwei von drei Studien statistisch nicht signifikant waren. Die Gruppen, die sich mit Feedback an der Reflexion beteiligten, fügten ihrer Posttestbewertung einen gewichteten mittleren Gewinn von  $d = .37$  hinzu, der über den der

*Vergleichsgruppen hinausging. Dieser Befund liefert moderate Belege für die Wirksamkeit der Praxis der Reflexion mit Feedback.*

**Schlüsselwörter:** Metakognition, akademische Sprache, Reflexion, LehrerInnen-Feedback, visuelle Kunst

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**Аннотация** (Эрик Э. Хове: Насколько важна для студентов художественных направлений подготовки метакогнитивная рефлексия?) Изучение искусства, особенно того участка, где особенно важно разбираться в перспективизации, сопряжено с вводом специальной лексики, освоение которой дается студентам нелегко. Метакогнитивная рефлексия является методом, который способствует улучшению процесса обучения студентов научной терминологии. Дополнительный эффект возникает за счет того, что сами преподаватели насаждают свою рефлексию на рефлексию студентов. За счет такого, почти экспериментального варианта, «замеряется» влияние метакогнитивной рефлексии и «профессиональной» эвалюации на способность студентов усваивать и запоминать научный язык. Такие замеры проводились трижды, чтобы сделать результаты более валидными. Если в группах, в которых внимание было сфокусировано на метакогнитивной рефлексии, обозначился рост средних показателей, то апостериорные тесты в двух из трех случаев не выявили существенных различий. Группы, в которых был задан ориентир на обратную связь, продемонстрировали в плане оценки значительный средний прирост  $d=.37$ ; этот показатель оказался выше, чем в сопоставляемых группах. Полученные данные позволяют сделать выводы об эффективности использования методов метакогнитивной рефлексии и обратной связи для решения конкретных учебных задач.

**Ключевые слова:** метакогниция, научный язык, рефлексия, обратная связь со стороны педагогов, визуальное искусство

## Introduction

The study of art, especially perspective, involves the use of specialized vocabulary words (Montague, 2013). Students in art do not always enjoy or respond well when asked to learn the more formal parts of the curriculum (Pennisi, 2013). This includes vocabulary words, which can be difficult to comprehend (Jucks & Paus, 2012), because they convey context specific concepts (Uccelli, Galloway, Barr, Meneses, & Dobbs, 2015). When students have learned to use the specialized vocabulary or academic language of a subject, communication between teacher and student improves (Lahey, 2017).

Knowing academic language also helps the learner think about the content (Nagy, Townsend, Lesaux, & Schmitt, 2012). While academic language is only a part of a visual art curriculum (National Coalition for Core Arts Standards, 2014), students need support from the teacher to learn it (Lahey, 2017). Metacognitive reflection (MR) offers a method to increase student learning of academic language, and other subjects in general (Bond, Denton, & Ellis, 2015; Jucks & Paus, 2012).

## Significance

Oddly, while reflection was almost universally called for in art education theory, few empirical studies have examined the efficacy of this technique when applied to the art classroom. A Boolean search of five leading peer reviewed art education journals revealed 21 articles that included the words “reflective” and “assessment” in the title, or body of the text. Of these, only a handful addressed students reflecting on their work in the manner Bond, Denton, and Ellis (2015) studied. None of these studies reported statistical information that could be further examined. Even the rich collection of case studies on reflective practice by Burnard and Hennessy (2006) while inspiring, did not provide statistical data to help the reader gauge the size of the impact of the described experiences.

## Theoretical Constructs

### *Metacognition*

Among the many theoreticians who have contributed to the study of metacognition, three stood out as foundational: Piaget, James, and Vygotsky (Fox & Riconscente, 2008). Building on the work of these foundational theoreticians, John Flavell and Ann Brown developed the theory of metacognition through research on children's use of learning strategies. Brown (1994) expressed metacognition as the process through which learners "have insight into their own strengths and weaknesses and access to their own repertoires of strategies for learning" (p.9).

After Brown's untimely death in 1999, Flavell continued to research metacognition extensively (e.g. Flavell, 1979; Flavell, 1985; Flavell, 1999; Flavell, 2000; Flavell, Green, & Flavell, 2000; Wellman, Ritter, & Flavell, 1975). Flavell differentiated among metacognitive knowledge, experiences, goals, and actions (Flavell, 1979).

### *Metacognitive Reflection*

One metacognitive action that was developed over time and used by students to attain learning goals was MR. Metacognitive reflection was defined as thinking about learning or "critical revisiting of the learning process in the sense of noting important points of the procedures followed, acknowledging mistakes made on the way, identifying relationships and tracing connections between initial understanding and learning outcome" (Georghiades, 2004a, p. 371).

Though beneficial, students did not always engage in metacognitive thinking (Wismath, Orr, & Good, 2014), even when provided with a variety of well-designed prompts and activities (Kwon & Jonassen, 2011). A conducive classroom environment was necessary for students to engage in meaningful reflection (Black, & Wiliam, 2009). Students must have trusted the teacher (Georghiades, 2004a) and been free from fear of judgment from other students or the instructor (Slinger-Friedman & Patterson, 2016). Even with ideal conditions, students needed the guidance of a teacher as they engaged in reflection. Learners' perceptions of their use of metacognition was often inaccurate (McCardle & Hadwin, 2015). They may have felt they were regularly reflecting in deep ways on their learning, while their reflections were relatively shallow and infrequent. Additionally, there was potential for students to be misled by their reflections. When students found a subject easy to learn and conflated this with thinking they would be able to easily remember the subject in the future, they may not have devoted enough effort to review (Proust, 2007). Finally, students must have applied the results of their reflection to future learning in order to complete the process and this was not guaranteed to happen (Tarricone, 2011).

To mitigate these pitfalls, teachers could model MR for their students (Ellis, Denton, & Bond, 2014). Zimmerman (2013) explained that when a student carefully watched a skilled person such as a teacher or more advanced student perform a task and subsequently observed positive benefits as a result of correct task completion, the student could become highly motivated to continue with their own learning. Additionally, when a person modeled self-correction this helped the observing student in the future when they encountered similar situations (Zimmerman, 2013). *Think Aloud* was an example of one such strategy where a teacher talked through their thinking as they solved problems in front of students (Ellis et al., 2014).

Though many teachers seemed to understand the benefits of MR they did little to promote it (Dignath & Büttner, 2018). If the educator did not intentionally plan time for reflective habits to be cultivated, the

other parts of the curriculum squeezed this out (Zuckerman, 2003). Fortunately, MR activities could be simple enough for teachers to easily implement in the face of competing priorities (Bannister-Tyrrell & Clary, 2017).

### *Teacher Feedback*

While teacher feedback seemed to be a common feature of many classrooms, it was often misapplied by well-meaning teachers when they praised a student without addressing the task (Hattie & Timperley, 2007). When done well, feedback helped the learner understand where to head next in their learning (Hattie & Clarke, 2019). This gave the learner direction and motivation to continue. In a recent meta-analysis, Hattie & Clarke (2019) reported feedback as having an effect of  $d = 0.73$  on student achievement.

Feedback could also prevent faulty models from being adopted. Students who did not know they misunderstood a concept might not have realized they had misunderstood until they were presented with information that challenged their understanding. Presenting students with feedback on their correct and incorrect answers was one way to help them sort out which areas they had learned and still needed to learn (Kwon & Jonassen, 2011).

### *Reflection in Art*

Reflection had long been a part of art education. As early as 1992, Winner and Simmons writing for Harvard's Arts PROPEL project asked art teachers to encourage art students to reflect on their work. Standards published by the National Coalition for Core Arts Standards (2018) called on students to respond to artwork by analyzing, interpreting, and evaluating artwork.

Many state and local school districts also advocated for students to reflect on their work. For instance, the Maryland State Department of Education (2018) published a standard titled *Use of Student Self-Reflection in Assessment Tasks*. Included on their Fine Arts Education website was a short form for students to use to reflect on their work. Another example was the San Diego Unified School District's (2018) *Self-Reflection Assessments*. As noted earlier, while reflection was almost universally called for in art education theory, few empirical studies had examined the efficacy of reflection when applied to the art classroom, providing impetus for the current study.

### *Academic Language*

The current study included teaching academic language related to perspective drawing. Academic language skill was increasingly recognized as critical to student learning (Lawrence, Corosson, Paré-Blagoiev, & Snow, 2015; Uccelli et al., 2015). Academic language could be difficult to comprehend (Jucks & Paus, 2012), because it conveyed context specific concepts (Uccelli et al., 2015). When students had learned to use the academic language of a subject, communication between teacher and student improved (Lahey, 2017). Knowing academic language also helped the learner think about the content (Nagy et al., 2012).

Metacognitive reflection was one method that could support student learning (Bond et al., 2015). During reflection a learner might have wondered if they really comprehended a word, realize they didn't and asked the teacher for help, or looked it up in a dictionary, and subsequently arrived at a more accurate understanding (Jucks & Paus, 2012). Beyond simply reciting a definition, students used these words to convey context specific concepts (Uccelli et al., 2015). Meaningful learning included practicing

the language (Uccelli et al., 2015) in various ways, including discussion (Lawrence et al., 2015). While this approach privileged formal language, thoughtful teachers took care not to devalue the language skills learners brought to the classroom from their communities (MacSwan, 2018).

## Review of Empirical Studies of Metacognition

The following studies provided evidence of the effectiveness of MR in improving learning outcomes. The findings of these studies, methods used, and authors' reflections on the efficacy of the methods and results informed the design and execution of the current study.

### *Metacognition and Math Journals*

Baliram and Ellis (2019) conducted a study in a high school geometry classroom. Five intact classes were randomly assigned to a treatment or comparison condition. A pretest was administered to help control for preexisting group differences. This was followed by an intervention consisting of MR, post-test, and retention test. The test was developed and published by a textbook company.

This study was informed by Hattie's (2012) work and included a teacher feedback component. Other researchers (e.g. Bianchi, 2007) have pointed out the possible differential effect of teachers reacting to student reflections. If one group benefited from improved instruction based on their expressed needs and another did not, this could have confounded interpretation of results. In order to prevent this, a third party, in this case one of the researchers, read the student responses and provided feedback. While this may have avoided biased responses from the teacher to individual students, the teacher was aware of general trends in feedback and did act on these. Therefore, this method may have only partially controlled for the differential effect noted earlier.

The author acknowledged that intact classes may have impacted results. For example, the sample of 75 participants was slightly below the number indicated by a power analysis. Nevertheless, the results did achieve statistical significance with the treatment group outscoring the comparison group on the post-test ( $F(1, 73) = 7.27, p = .009, \eta_p^2 = .09$ ) (Baliram & Ellis, 2019). Though there were limitations, this study was thoughtfully conducted and was representative of what could be realistically done in educational settings (Gall et al., 2007).

### *Metacognition, Academic Achievement, and Intelligence*

Ohtani and Hisasaka (2018) conducted a meta-analysis of 118 articles that reported correlations between metacognition and academic achievement and included a measure of intelligence. After combining the effect sizes of the articles, Ohtani and Hisasaka (2018) reported a moderate correlation between metacognition and academic achievement when controlling for intelligence ( $r = .28, 95\% \text{ CI } [0.24, 0.31], p < .001$ ). They concluded that intelligence was a confounding variable. Individuals with higher intelligence tended to process information rapidly, which might have freed up extra mental capacity for metacognition (Ohtani & Hisasaka, 2018).

A limitation of this study was the authors' choice to exclude students and adults with disabilities. During the 2015-16 school year, 13% of all students age 3-21 enrolled in U.S. public schools received special education services (McFarland et al., 2018). Excluding students with disabilities meant a significant segment of the population was not included in the study.

## *Metacognition and Confidence*

Weight (2017) studied 171 elementary and secondary teachers and support staff. In this correlational study, staff members who used metacognitive instructional strategies reported greater confidence in their ability to work with students who experienced anxiety ( $\chi^2(1, N = 171) = 20.93, p < .05$ ) on a self-report, Likert-type survey (Weight, 2017).

The sample of surveyed teachers was large and representative of both primary and secondary teachers with equal distribution of a wide range of years of experience.

In addition to the survey, a small group of teachers were also interviewed to gather qualitative insights on their use of metacognitive strategies and the extent to which these strategies increased their confidence in working with students who experienced anxiety.

As the author noted, surveys were limited by the honesty of the participants (Weight, 2017). Even when respondents were presumably as forthright as possible, there was a known lack of fit between teacher report of metacognitive promotion and actual practice (Dignath & Büttner, 2018) which calls for caution when reading the results of the self-report measure.

## *Dissertation Synthesis*

Bond, Denton, & Ellis (2015) examined the impact on student learning as a result of reflective self-assessment as documented in 10 doctoral dissertations. These dissertations reported results from a broad array of classes including math, science, world languages, English Language arts, social studies and geography. In each study, students were asked to participate in reflective activities towards the end of the period. Teacher feedback was a part of the intervention in six of the studies. A positive effect size using Cohen's *d* was documented for posttest scores in seven of the studies, while three studies showed a negative effect size. The resulting weighted mean effect size was 0.28 for the posttest, with a range of -0.34 to 0.69 (Bond et al., 2015).

Bond et al. (2015) clearly defined their methodology including the criteria for inclusion of studies, information about each study, and how effect sizes were calculated and combined. A limitation of this synthesis was that all studies were conducted at one institution, generally representing the public schools of one geographical area, with an exception. To strengthen these findings studies including students from other types of schools and locations could be added.

## *Learning Science*

Georghiades (2004b) conducted an experiment with students in Year Five. The average age of these students was 11. After placing 60 students evenly into two groups, one group received metacognitive instruction as part of the regular classroom activities, the other group did not. With this exception both groups received the same instruction on concepts in the Current Electricity unit. Scores from the previous year's science exam and a general thinking ability exam were included in the analysis to ensure a valid comparison between groups could be made. Following four 80-minute lessons, both groups were assessed three times on their understanding of scientific concepts related to the lessons. The same assessment was used each time. The test was given a week, two months, and eight months after the unit concluded. The groups were initially close in mean scores, however over time the experimental group retained more information as evidenced on the final administration of the exam ( $p = .048$ ) (Georghiades, 2004b).

The statistical test used in this study provided a reason for readers to interpret the results with caution. The researcher relied on three t-tests to analyze the data. The use of multiple t-tests inflated the chance of Type I error (Field, 2013). A more conservative approach would have been to use ANOVA with Bonferroni adjustment (Tabachnick & Fidell, 2007). Additionally, the researcher adjusted instruction based on reading student diaries. Other researchers (e.g. Bianchi, 2007) have pointed out the possible differential effect of teachers reacting to student reflections. Although aspects might have been improved, it was the type of situated inquiry that relied on methods beyond student self-report and was needed to add to our knowledge of the effects of metacognition (Dinsmore et al., 2008).

## Method

### *Research Questions*

The current study was guided by the following questions:

1. To what extent does MR influence students' ability to learn and retain academic language related to perspective drawing?
2. To what extent does teacher feedback to the MR influence students' initial ability to learn and retain academic language related to perspective drawing?

### *Research Design*

The research design used in this study was quasi-experimental, conducted with intact classes taught by the investigator (see Table 1).

Table 1: *Quasi-Experimental Design*

Group	Pretest	Intervention	Posttest	Retention Test
Reflection with Feedback	0	X <sub>1</sub>	0	0
Reflection	0	X <sub>2</sub>	0	0
Comparison	0		0	0

The sample was a convenience sample consisting of students enrolled in the investigator's semester length middle school visual arts classes. To overcome the reduced internal validity of intact groups, three iterations of the study: Spring 2018, Autumn 2018, and Winter 2019, were conducted with different groups over several terms. Because there was a wide range of ages and abilities represented in each class, students with prior art knowledge might have performed better on the assessments due to their prior knowledge and not due to their assigned condition, or for other reasons not addressed by the study. The pretest was an attempt to mitigate this threat to internal validity (Gall et al., 2007).

## Participants and Sampling Process

### *Demographics*

The students sampled were enrolled in the investigator's middle school visual arts class. This school was located in a city in King County, Washington State, and was part of a K-12 public school district that served approximately 17,000 students. The middle school in which the studies were conducted served approximately 800 students in grades six through eight. Of these students, 51.4% were female while 48.6% were male. The school records indicated .5% of students enrolled were American Indian/Alaskan Native, 8.1% Asian, 10 % Black/African American, 26.6 % Hispanic/Latino of any race(s), 5.2% Native Hawaiian/Pacific Islander, 40% White, and 9.2% Two or More Races. Approximately 14.8% of these students were English Language Learners, 12.5% received special education support, and 59.4% of the students qualified for free or reduced lunch. The school had an Unexcused Absence Rate of 1.81%.

### *Assignment of Condition*

To remain objective, the investigator flipped a coin to decide which condition each class would receive. The assignment of condition took place before the unit commenced. The first coin flip determined MR intervention or comparison. For classes assigned to the MR condition, the second flip assigned reflective assessment with or without teacher feedback.

### *Sample Size*

To ensure the number of participants in each study was large enough for the statistical test to detect an effect if it existed (Gall et al., 2007), an a priori power analysis was conducted using G\*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007). This program calculated required sample size based on investigator determined power level, significance level, and the population effect size expected to be found at a set probability. For this analysis the population effect size was set to 0.3 (Ellis, 2010). Output from the analysis indicated a total sample size of 75 required with ( $p < .05$ ) and a power level of .8 (Lakens, 2013).

### *Description of Samples*

Five art sections were included in each study. Students ranged in age from 11-15. The demographics of each class largely mirrored the overall school demographics with one exception, noted in the limitations section. A majority of students enrolled in Art One were in sixth grade and a majority of Art Two students were in seventh or eighth grade. The classes averaged 25 students, of whom 20.6 participated in the study, on average. Students in these classes had widely varying levels of past art instruction and skill. A small percentage of students reported receiving regular art instruction in elementary school, while many received sporadic, or none.

In the first study conducted in Spring 2018, three classes were assigned to reflective assessment (see Table 2).

Table 2: *Spring 2018 Sample*

Condition	Section	Class Period	<i>N</i>
Comparison	Art 1	2	21
Reflection with Feedback	Art 1	3	17
Reflection with Feedback	Art 2	4	21
Comparison	Art 2	5	22
Reflection only	Art 1	6	21

In the second study conducted in Autumn 2018, three classes were assigned to reflective assessment (see Table 3).

Table 3: *Autumn 2018 Sample*

Condition	Section	Class Period	<i>N</i>
Reflection with Feedback	Art 1	2	21
Reflection only	Art 2	3	23
Comparison	Art 2	4	18
Reflection with Feedback	Art 2	5	16
Comparison	Art 1	6	16

In the third study conducted in Winter 2019 three classes were assigned to reflective assessment (see Table 4).

Table 4: *Winter 2019 Sample*

Condition	Section	Class Period	<i>N</i>
Comparison	Art 1	2	22

Reflection only	Art 2	3	21
Comparison	Art 2	4	23
Reflection only	Art 2	5	21
Reflection with Feedback	Art 1	6	25

### *Protection of participants*

This study involved typical classroom instruction and assessment procedures, which did not require informed consent from participants. The investigator protected the privacy of participants' data by only reporting scores that could not be linked to individual students. Additionally, raw data was kept in secure locations and destroyed at appropriate intervals as prescribed by Washington State Administrative Code. Participating in this study posed no risks to students.

### *Measures*

The first study relied on a teacher generated thirty-question multiple choice test of academic language related to perspective drawing. This test was developed by the investigator in the role of classroom teacher as part of the regular curriculum. While Gall et al. (2007) noted the limitations of teacher generated tests, after searching, no suitable standardized measure of the academic language relating to perspective was located. Thus, additional measures were undertaken to ensure the test was appropriate for use in research.

Construct validity was assessed by comparison to similar measures in published art curricula and inclusion of academic language listed in state and national visual art standards. Content validity was attained through a review by a group of art teachers teaching similar ages. The test was examined for reliability by generating split-half reliabilities using posttest scores. A value above .7 indicated that an instrument was consistently measuring the same factor (Vogt & Johnson, 2011). Spearman's *rho* correlations between the halves of the Spring 2018 test administration were .81 indicating a reliable measure.

Following the Spring 2018 test administration, a potential ceiling effect was noted in the results. This effect was indicated by score distributions on the posttest with negative skewness (see Table 5) (Ho & Yu, 2015). A ceiling effect might have prevented proper data analysis (French, Sycamore, McGlashan, Blanchard, & Holmes, 2018). To reduce this effect, the investigator added an additional six questions of greater difficulty bringing the total to 36. The same measures to assure validity and reliability used with the original version were conducted on the revised test. Spearman's *rho* correlations between the split-halves of the Autumn and Winter test administration were .80 and .71 respectively, indicating a reliable measure.

Table 5: *Tests of Normality Spring 2018*

	<i>N</i>	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error

---

Pretest	102	0.077	0.239	0.971	0.474
Posttest	102	-0.635	0.239	-0.239	0.474
Retention Test	102	-0.999	0.239	1.667	0.474

---

## *Procedure*

For each iteration, at the beginning of the ten-day perspective unit, a pretest on academic language related to perspective drawing was administered to all classes on day one. Students in all conditions were then instructed over the course of the following eight, 56-minute class periods using a variety of methods including teacher modeling, note-taking, guided practice, independent practice and group discussion. At the end of the unit on day ten, following a review, all groups completed the same questions as a posttest. Three weeks after the posttest, the same exam was administered as a retention test.

The investigator, in the role of classroom teacher, used the same instructional methods with all classes, varying only the way class ended. The classes assigned to the comparison group did not complete reflective assessments, but instead spent the final five minutes of class on instructional days in guided or independent practice. For the classes assigned to reflective assessment, students engaged in a four to five-minute reflective activity. These took place on instructional days, toward the end of class, for a total of nine reflective sessions. During these sessions, students were asked to complete a short reflective assessment of the day's learning such as an *I Learned* statement, a *Key Idea Identification*, or a *Clear and Unclear Windows* (Ellis, & Denton, 2010). The MR prompt used was varied from day to day, so students would not lose interest (Georghiades, 2004b).

Reflection only classes did not receive feedback on their reflective assessments apart from the investigator in the role of classroom teacher thanking them for completing it.

In the reflection with feedback condition, the investigator in the role of classroom teacher individually responded to each student's reflection with a short note or verbal comment related to what they wrote as soon as possible (Slinger-Friedman & Patterson, 2016). Because exact timing of the delivery of the feedback was controversial (Shute, 2008), some delayed feedback was also provided. When an obvious theme in student responses emerged, the investigator in the role of classroom teacher communicated this to the entire class (Hattie & Clarke, 2019), often as a way of introducing the following day's lesson.

Students in any class who were absent for the pretest were offered a chance at the beginning of the following class session to complete the assessment before instruction began. Students who were absent, or unable to complete the pretest during this time were not included in the study. These students' attendance in class during the lessons and then subsequent completion of the pretest would have skewed the results. Students who missed significant class time, in this case three or more lessons out of the ten-day unit, were also dropped from the study. The limitations section includes more information on these dropped students.

## *Statistical Analysis*

Because ANOVA had a lower chance of Type I error than multiple t-tests (Field, 2013) and allowed post-hoc testing with a Bonferroni adjustment (Tabachnick & Fidell, 2007), a repeated measures ANOVA was used in this study. Mean scores and standard deviations for each group at each test time were calculated. Data was then checked for the usual assumptions of the general linear model including skewness and kurtosis (Vogt & Johnson, 2011). To conduct this test, scores of skewness and kurtosis were converted to z-scores by dividing by their standard error and comparing their absolute value to 1.96. Scores greater than 1.96 were statistically significant at the ( $p < .05$ ) level (Field, 2013).

To conduct the repeated measures ANOVA, student scores on the academic language test were entered into SPSS Version 25 software. Mauchly's test was used to see if the assumption of sphericity was violated, if so the Greenhouse-Geisser values were interpreted (Field, 2013). Any missing scores on post or retention test were replaced with a mean substitution.

A repeated measures ANOVA was used to analyze scores based on whether they came from a group engaged in MR or not, and presence or absence of teacher feedback on the students' reflections. As such, there was one within subjects factor: time of test, with three levels: pretest, posttest, and retention test. There was one between subject factor: group, with three levels: reflection with feedback, reflection only, and comparison. The level of statistical significance for this analysis was set at ( $p < .05$ ).

A post-hoc test with a Bonferroni adjustment post-hoc test was conducted. Post-hoc comparisons allowed the investigator to determine the direction and magnitude of differences based on group (Field, 2013). A Bonferroni adjustment was used to reduce chances of a Type I error or detecting an effect when there was not one (Tabachnick & Fidell, 2007).

In addition to tests of statistical significance the investigator calculated effect sizes pretest to posttest and pretest to retention test for each study using Cohen's  $d$ . An effect size provided a way to express the practical significance of a study (Ellis, 2010). Pretest to posttest comparisons showed which group had higher initial gains while, pretest to retention test comparisons showed which group better retained these gains (Little, 1960).

Effects by condition were also combined to compare overall results. Borenstein, Hedges, Higgins, and Rothstein (2009) proposed using a fixed-effect model to calculate mean weighted effect sizes if two conditions were met: studies were very similar, and the object was to calculate effect sizes for the population represented in the studies only, not to generalize to other groups. The current study satisfied these conditions. The method used in this study to calculate weighted mean effect size involved multiplying each studies' effect size by the sample size of that study, adding these together and then dividing by the combined sample size of all three studies (Ellis, 2010).

## Results

### *Spring 2018*

In the Spring 2018 study, all groups made gains between each test (see Figure 1), except for the reflection with feedback group which plateaued between post and retention test.

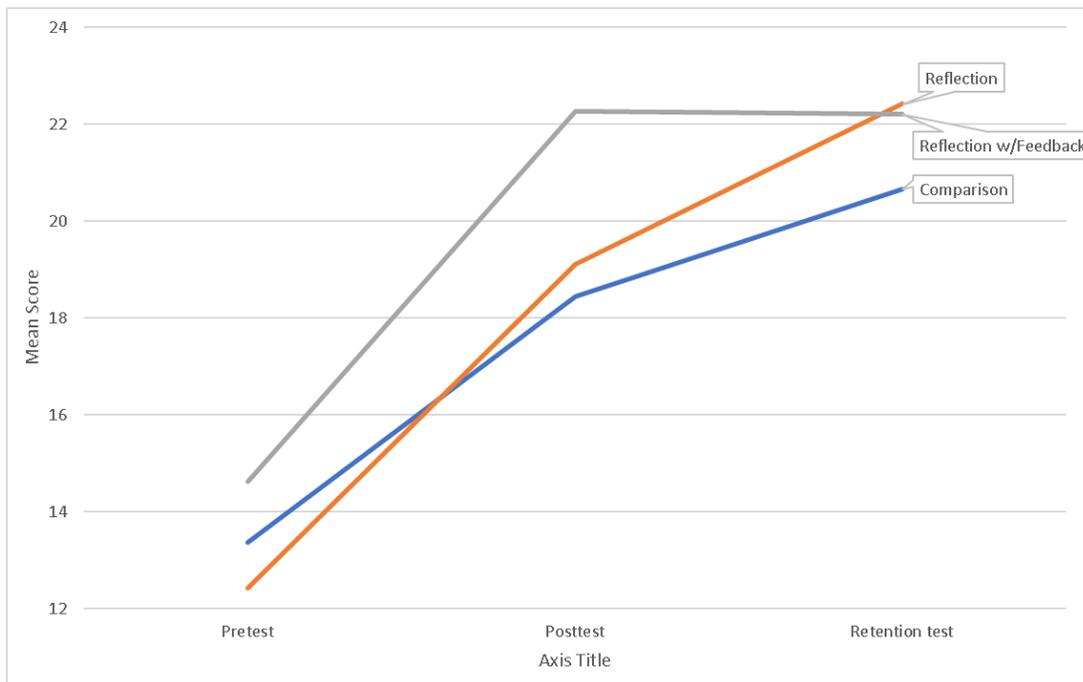


Figure 1: *Mean Score by Condition Spring 2018*

There was statistically significant: positive kurtosis in the pretest scores, negative skewness in the posttest, and both negative skewness and positive kurtosis in the retention test (see Table 5). The investigator concluded the non-normality was based on real data and not errors. Because non-normality could be offset by the sample size, and this study involved 102 subjects, the investigator proceeded with the repeated measures ANOVA (Field, 2013).

Mauchly's test confirmed the assumption of Sphericity was not violated ( $p = .27$ ). There was a statistically significant within-subject interaction effect between time of test and condition ( $F(4, 198) = 2.66, p = .03$ ). However, a Bonferroni adjustment revealed group score differences were not statistically significant when compared across condition.

### *Autumn 2018*

In the second study conducted in autumn 2018, all groups made gains between each test (see Figure 2). The reflection only group started with the highest pretest mean scores and maintained this lead for the following two assessments.

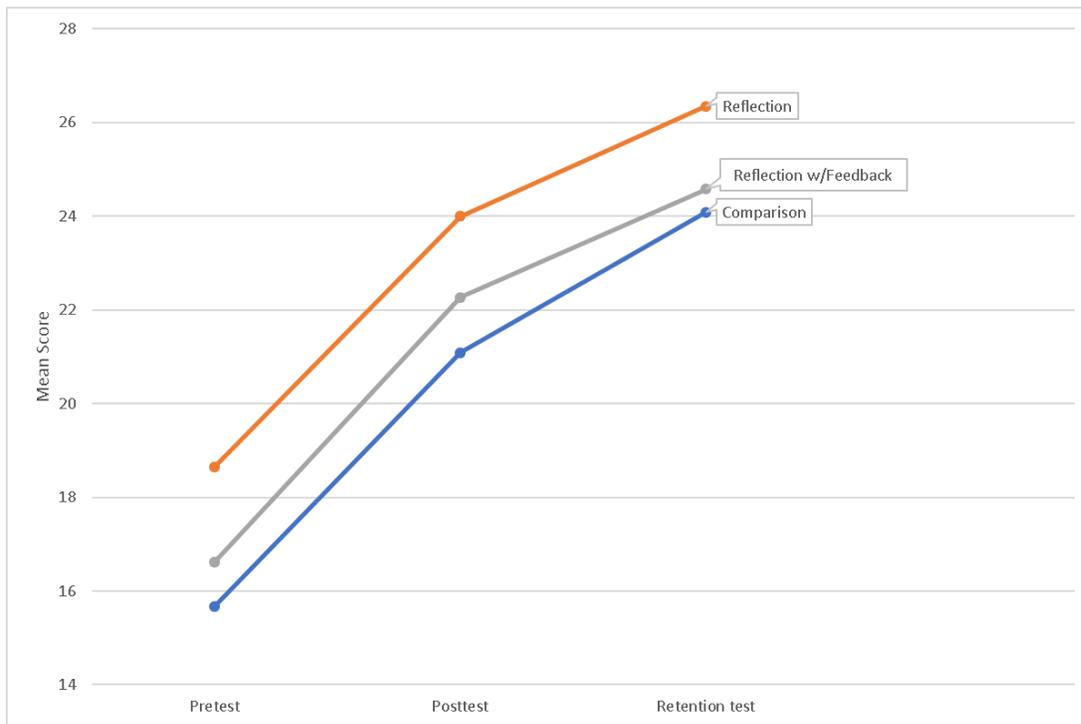


Figure 2: Mean Score by Condition Autumn 2018

There was statistically significant positive skewness and kurtosis in the pretest scores (see Table 6).

Table 6: Tests of Normality Autumn 2018

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Pretest	94	0.702	0.249	1.12	0.493
Posttest	94	-0.205	0.249	-0.414	0.493
Retention test	94	-0.233	0.249	-0.641	0.493

While there was mild negative skewness and kurtosis in the post and retention tests a simple test confirmed these to be not statistically significant (Field, 2013). The investigator concluded the pretest non-normality was indicative of subjects having limited knowledge of test items prior to the unit and proceeded with statistical testing (Field, 2013).

Mauchly's test revealed the assumption of Sphericity had been violated  $\chi^2(2) = 13.96$  ( $p < .001$ ) so the Greenhouse-Geisser values were interpreted. Bonferroni adjustment revealed group score differences were not statistically significant when compared across condition.

### Winter 2019

In the third study conducted in winter 2019, all groups made gains between each test, except for the reflection group which plateaued between posttest and retention test (see Figure 3).

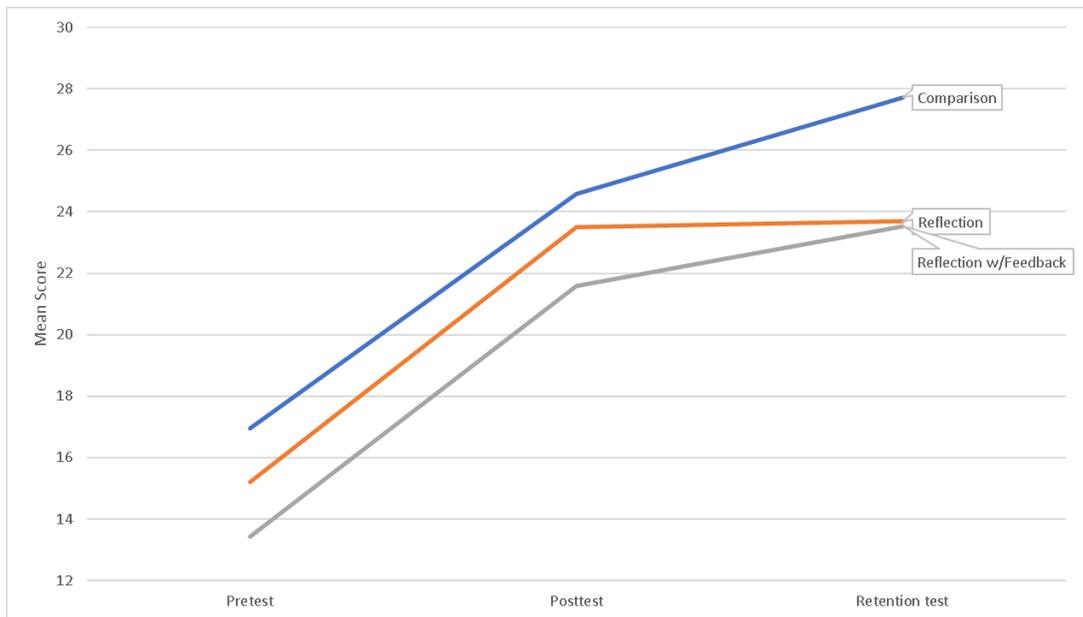


Figure 3: Mean Score by Condition Winter 2019

There was statistically significant positive skewness in the pretest scores (see Table 7).

Table 7: Tests of Normality Winter 2019

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Pretest	112	0.456	0.228	0.872	0.453
Posttest	112	-0.262	0.228	-0.332	0.453
Retention Test	112	-0.259	0.228	-0.008	0.453

While there was mild skewness and kurtosis in the posttest and retention test a simple test confirmed these to be not statistically significant (Field, 2013). The investigator concluded the pretest non-normality was indicative of subjects having limited knowledge of test items prior to the unit and proceeded with statistical testing (Field, 2013).

Mauchly's test confirmed the assumption of Sphericity was not violated ( $p = .30$ ). There was a statistically significant between-subject effect based on condition ( $F(2, 109) = 7.21, p < .001$ ). A Bonferroni adjustment revealed group score differences between the comparison group and the reflection group were statistically significant ( $p = .03$ ). Score differences between the comparison group and the reflection with feedback group were also statistically significant ( $p = .002$ ) (see Table 8).

Table 8: *Post-Hoc Winter 2019*

*Multiple Comparisons*

Bonferroni Adjustment

(I) Condition	(J) Condition	Mean Differ- ence (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Comparison	Reflection	2.287*	0.859	.027	0.197	4.376
	Reflection with Feedback	3.562*	0.999	.002	1.135	5.993
Reflection	Comparison	-2.287*	0.859	.027	-4.376	-.197
	Reflection with Feedback	1.277	1.012	.628	-1.182	3.737
Reflection with Feedback	Comparison	-3.564*	0.999	.002	-5.993	-1.135
	Reflection	-1.277	1.012	.628	-3.737	1.182

Based on observed means.

The mean difference is significant at the .05 level.

### *Effect Sizes*

To synthesize the results and look for trends in the data within and across all three studies the investigator calculated effect sizes. Pretest to posttest effect sizes showed which group had higher initial gains (see Table 9). These effects were also pooled as weighted mean effect sizes to compare overall results.

Table 9: *Pretest to Posttest Effect Sizes in d*

Condition	Spring 2018	Autumn 2018	Winter 2019	Weighted Mean
Comparison	.94	.89	1.57	1.15
Reflection	1.46	.72	1.61	1.29
Reflection with Feedback	1.62	1.11	1.75	1.52

Pretest to retention test effect sizes show which group better retained these gains (see Table 10). These effects were also pooled as weighted mean effect sizes to compare overall results.

Table 10: *Pretest to Retention Test Effect Sizes in d*

Condition	Spring 2018	Autumn 2018	Winter 2019	Weighted Mean
Comparison	1.35	1.31	2.24	1.66
Reflection	2.42	1.01	1.58	1.69
Reflection with Feedback	1.55	1.62	2.14	1.79

### Summary of Results

Although the data did show deviations from normality in each study, a trend emerged. Students generally performed poorly on the pretest resulting in positive skewness and kurtosis in the pretest scores. After learning the material most groups made large gains and these were now grouped on the other

end of the curve, as evidenced by both negative skewness and positive kurtosis in the posttest, and retention test.

Because this trend was most likely a reflection of accurate data and not due to error, the investigator did not attempt to transform the data. Additionally, these deviations from normalcy were not extreme. Mauchly's test revealed that in two cases the assumption of Sphericity was not violated, the one time it was, the Greenhouse-Geisser values were interpreted.

In the Spring 2018 study, repeated measures ANOVA revealed a statistically significant within-subject interaction effect between condition and time of test. However, in this case and in the Autumn 2018 study, a Bonferroni adjustment revealed score differences between groups were not statistically significant at the  $p < .05$  level. In the Winter 2019 study there was a statistically significant between-subject effect based on condition ( $F(2, 109) = 7.21, p < .001$ ). A Bonferroni adjustment revealed group score differences between the comparison group and the reflection group were statistically significant ( $p = .03$ ). Score differences between the comparison group and the reflection with feedback group were also statistically significant ( $p = .002$ ).

In addition to tests of statistical significance, the investigator calculated effect sizes pretest to posttest and pretest to retention test for each study using Cohen's  $d$ . Effects by condition were also combined as weighted mean effects to compare overall results. These weighted mean effects favored the reflection with feedback group, followed by the reflection only group, for both pretest to posttest and pretest to retention test.

## Discussion

During the Spring 2018 study, as suggested by the literature, the reflection with feedback group made the greatest gains pretest to posttest. The reflection group also outperformed the comparison group, starting lowest overall and then surpassing the reflection with feedback group on the retention test. The reflection with feedback group plateaued between posttest and retention test. Engaging in reflection may have caused this group to maximize gains early in the study and achieve their full potential by the posttest. The other two groups, possibly due to continued use of the academic language related to perspective drawing in later units that built on the first unit, continued to learn to apply the academic language, explaining the unusual increase between posttest and retention test.

In the Autumn 2018 study, the comparison group unexpectedly made the greatest gains post to retention test, almost surpassing the reflection with feedback group in mean score on the retention test. This sample suffered from a high attrition rate of 36 subjects compared to 16 and 19 from Spring and Winter respectively. At the time of this study, students reported high rates of illness. This might have partially accounted for the high absence-based attrition as well as the slight decrease in learning in general seen in this study compared to the other two as evidenced by effect sizes both post and retention (see Tables 9 and 10).

In the Winter 2019 study, based on effect sizes (see Tables 9 and 10), all conditions in this study made the greatest gains compared to any other conditions in previous studies with one exception. This could have been partially due to the investigator in the role of classroom teacher improving the delivery of lessons. Unexpectedly, the comparison group began and continued to outscore either intervention group throughout the study and scored the highest mean score on all tests. A possible reason for the relatively high performance of the comparison group was the addition of a reading intervention program at the middle school where the study took place, as discussed further in the limitations section.

## Synthesis

To synthesize the results and look for trends in the data across all three studies the investigator calculated weighted mean effects. An effect size provided a way to express the practical significance of a study (Ellis, 2010). While scores from two of the three studies were not statistically significant based on condition, effect sizes favored the intervention overall to help students learn and apply the academic language of perspective drawing.

John Hattie (2012) cited anything over  $d = 0.40$  as a worthwhile effect size for an academic intervention. The groups who engaged in reflection with feedback added an average ( $d = 0.37$ ) to their initial scores and an average ( $d = 0.13$ ) to their retention scores above the comparison groups. These findings were strengthened by comparable results in three similar studies. When an educational intervention can add these moderate effect sizes to the learning and retention for minimal cost, it is generally worth pursuing. However, as these calculations were based on quasi-experimental studies, other factors could have contributed to these results.

## Limitations

This study had a number of limitations. Some were outside the investigator's control; some were due to intentional choices. These limitations were listed to help the reader draw more accurate conclusions and to keep the results in perspective in relation to other settings.

Because this study was quasi-experimental, there was a major threat to internal validity. While the assignment of condition was random by group, the sample was not randomly selected, nor were individuals randomly assigned to groups, this meant differences between groups could be due to preexisting conditions and not the treatment (Gall et al., 2007). The pretest was an attempt to mitigate this threat to internal validity.

In addition, the comparison between five intact art classes composed of students of various ages and experience levels taught by one investigator in the role of classroom teacher, while not ideal for external validity, was the best available in this study. Using intact groups was common in studies involving public school students (Gall et al., 2007).

As noted earlier, this study relied on a teacher generated test. While Gall et al., (2007) noted the limitations of these instruments, no suitable standardized measure of the academic language related to perspective drawing was located for use in this study, so additional measures were undertaken to ensure the test was reliable. In the future, a standardized test might be developed to help the results of a similar study to have enhanced external validity.

Timing of and number of tests students take in a given day, as well as frequency and duration of breaks, affected assessment results (Sievertsen, Gino, & Piovesan, 2016). Use of intact classes meant that time of day was not considered in the current study. Nor were the number of other tests given that day, nor break information, because gathering this type of information was beyond the scope of this study. Future studies might examine these factors.

Intelligence was a confounding variable in studies of achievement and metacognition (Ohtani & Hisasaka, 2018). While Georghiades (2004b) was able to obtain general information on the students' academic ability in his study by accessing archival information, this type of data was not available to the researcher and administering a general aptitude test was beyond the scope of the current study.

The need for academic data was underscored during the Winter 2019 study. As previously noted, a possible reason for the relatively high performance of the comparison group as seen in effect sizes (see Tables 9 and 10) was the addition of a reading intervention program at the middle school where the study took place which caused discrepancies between groups that were not present in the first two studies. Two new reading intervention classes were formed at the start of the term, just prior to the Winter 2019 study. Scores from a standardized reading test were used to identify students who would benefit from a reading intervention, these students were then placed with a language arts teacher who would provide targeted interventions. This schedule change had the effect of grouping struggling readers together to attend the reading intervention.

By default, these same students would potentially attend elective classes together as a group. While this possibility was not formally evaluated due to the reading scores being unavailable for analysis at the time of the study, there was data to suggest this grouping took place. This included number of students served by an Individual Education Program (IEP) or 504 plan, and number of students identified as English Language Learners (ELL) (see Table 11).

Table 11: *Characteristics of Winter 2019 Sample*

Condition	N	Students	
		Served by	Identified as
		IEP or 504 plans	ELL
Comparison	45	5	4
Reflection	42	8	14
Reflection with Feedback	25	suppressed	suppressed

In general, students served by IEPs for a specific learning disability experienced greater difficulty in reading than their peers who were not served by IEP plans (Corcoran & Chard, 2019). Students identified as ELL also had greater difficulty comprehending what they read in English than their peers who were not identified as ELL (Praveen & Rajan, 2013). Because reading was a major part of learning and retaining academic language this suggested that the reflection group had the most challenges in learning and retaining academic language. This was one explanation for the lower gains this group made from posttest to retention test (see Figure 3). The inability to conclusively analyze the covariate of reading ability was a limitation of the study.

The current study was based on nine reflective sessions over ten days. Georghiades (2004b) implemented between 20 to 30 reflective sessions, this length and frequency may be required for a long-term benefit gained by using metacognitive strategies. In studies where a significant effect was detected, the interval was often longer than two weeks (e.g. Rabin, & Nutter-Upham, 2010).

During the 2017-18 school year, the Washington State Unexcused Absence Rate was 0.80% (OSPI, 2017). The District in which the study took place had an Unexcused Absence Rate for the same year of 0.69%, while the Unexcused Absence Rate at school in which the study took place was 1.81%, almost three times the district average. Absence caused 16 students to be dropped from the Spring 2018 study, 36 from the Autumn 2018 study and 12 from the Winter 2019 study. These dropped students represented 13.5%, 27.7%, and 25.0% respectively of each total enrollment for the investigator in the role of classroom teacher.

Low attendance at school could have many causes, but anxiety was certainly a contributing factor (Ingul & Nordahl, 2013). Weight's (2017) study provided evidence that teachers and their students benefit from MR. The chronically absent students who were dropped from the current study may have been the ones who would have benefited most from the perceived environmental improvements of MR (Black & Wiliam, 2009).

Bianchi (2007) noted the possible differential effect of teachers reacting to student reflections as a weakness in earlier studies. If one group benefited from improved instruction based on their expressed needs and another did not, this could confound interpretation of results. To avoid the investigator in the role of classroom teacher adjusted instruction for all classes based on feedback received from the reflection groups. This may have inflated the comparison group scores, possibly obscuring some of the effects of the intervention.

A conducive classroom environment for reflection (Black, & Wiliam, 2009) included student trust of the teacher (Georghiades, 2004a; Hattie & Clarke, 2019), the current studies were conducted in the context of a semester length class, at times, towards the beginning of the term. There may have been insufficient time for students to develop trust of the investigator in the role of classroom teacher. Additionally, students must have been free from fear of judgment from other students or the instructor (Slinger-Friedman & Patterson, 2016). Perhaps the manner in which the instructor provided feedback was not optimal. An anonymous method, while less responsive, may have promoted greater feelings of student security.

## Further Research

While research on metacognition was broad and well developed, some specific applications had not been fully studied, and not all studies were as rigorously conducted.

Bannert and Mengelkamp (2008) called for improved measures of metacognition. They hypothesized that while questionnaires measure quantity, and think aloud methods measure quality, both have their limitations. Other researchers (e.g. Dent & Koenka, 2016; McCardle & Hadwin, 2015, Ohtani & Hisasaka, 2018; and Schellings & Van Hout-Wolters, 2011) have made similar observations and noted the need for further research in this area.

There were multiple reports of teachers valuing metacognitive strategies, but not spending much time promoting them (e.g. Bannister-Tyrrell & Clary, 2017; Dignath & Büttner, 2018). Studies which ask the types of questions Bannister-Tyrrell and Clary (2017) posed to more teachers to see if the reasons for this disconnect can be understood and addressed, are called for.

Studies such as the current one, provided evidence of the short-term benefits of MR. There is reason to believe that metacognition has long-term effects as well (Georghiades, 2004a). This will require longitudinal studies of the type called for by Dignath and Büttner (2008) and Panadero (2017).

The link between feedback and improved academic outcomes has been studied in depth (e.g. Hattie & Clarke, 2019; Hattie & Timperley, 2007; Schunk, Pintrich, & Meece, 2008), but some areas, including the best timing of the delivery of the feedback are still being researched (Shute, 2008). Baliram and Ellis (2019) called for additional study in this area.

## Conclusion

The empirical evidence provided by this study should be interpreted with some caution based on aforementioned limitations. A strength of this study was that it did not rely on self-report which was

often the case in these types of study (Dinsmore et al., 2008). Also, because it was conducted in a school classroom, it had a certain “real world” authenticity. Thus, the study avoided Zimmerman’s (2011) criticism that many of these types of studies have been done outside the classroom context and after the fact.

Metacognition reflection is a not magic solution to every problem in education. Ellis and Bond (2016) cautioned that many educational innovations, even those with sound theoretical foundations are subject to failure when attempted in the classroom. They also reminded us that using numbers as the sole basis for judging the effectiveness of an intervention in a democratic society, while getting at the academic side of things, runs the risk of overlooking other beneficial aspects of school life such as social interaction (Ellis & Bond, 2016).

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AnnRené Joseph (USA)

## Arts and Academic Achievement—Empirical Evidence for Arts Realities in United States Education Law and Around the World

**Abstract:** *That the arts enhance academic achievement has been a claim of educators for the past century. This experimental study examined whether and to what extent the use of creative dramatics interventions increased the vocabulary achievement of fourth grade students in a language arts classroom. The 20-day study was conducted across five weeks of school—for 45 minutes each day—during the normally scheduled language arts instruction block. It included a pretest, 17 consecutive school days of instruction, and a posttest. A retention test was administered five weeks later. Three fourth grade teachers were randomly assigned to a random sample of 83 fourth graders. The study was conducted at a Learning Assistance Program (LAP) reading and math school, in a large rural school district in Washington State. Descriptive statistics were used to describe the demographics of the sample...inferential statistics were used to calculate the differences between groups. (Joseph, 2013/2014, pp. 2-3)*

**Keywords:** *creative dramatics, vocabulary achievement, arts and academic achievement, arts integration, integrated arts, interdisciplinary arts education, language arts, arts education, communication*

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**摘要** (AnnRené Joseph: 艺术与学术成就 - 在美国和世界范围内的教育法中艺术现实的经验证明) : 艺术提高了学术成就, 这是上世纪教育工作者的一大主张。这项实验性的研究探讨了创造性的戏剧性的干预措施是否以及在何种程度上提高了语言艺术课堂上四年级学生的词汇成绩。为期 20 天的研究是在学校五个星期内进行的, 每天 45 分钟, 这也是往常计划的语言艺术课程。它包括一个预测, 连续 17 天的上课以及一个后期测试。五周后, 进行了保留测试。三名四年级的老师按照随机原则编制给 83 名四年级的学生。这项研究是在华盛顿州一个大型农村学区学习援助计划 (LAP) 中的阅读和数学学校进行的。描述性的统计数据用于描述样本中的人口统计 (...) 推断性的统计数据用于计算组与组之间的差别 (Joseph, 2013/2014, S. 2-3)。

**关键词:** 创意戏剧, 词汇成功, 艺术和学术成就, 艺术融合, 融合艺术, 跨学科艺术教育, 语言艺术, 艺术教育, 沟通

**摘要** (AnnRené Joseph: 藝術與學術成就 - 在美國和世界範圍內的教育法中藝術現實的經驗證明) : 藝術提高了學術成就, 這是上世紀教育工作者的一大主張。這項實驗性的研究探討了創造性的戲劇性的干預措施是否以及在何種程度上提高了語言藝術課堂上四年級學生的詞彙成績。為期 20 天的研究是在學校五個星期內進行的, 每天 45 分鐘, 這也是往常計劃的語言藝術課程。它包括一個預測, 連續 17 天的上課以及一個後期測試。五週後, 進行了保留測試。三名四年級的老師按照隨機原則編制給 83 名四年級的學生。這項研究是在華盛頓州一個大型農村學區學習援助計劃 (LAP) 中的閱讀和數學學校進行的。描述性的統計數據用於描述樣本中的人口統計 (...) 推斷性的統計數據用於計算組與組之間的差別 (Joseph, 2013/2014, S. 2-3)。

**關鍵詞:** 創意戲劇, 詞彙成功, 藝術和學術成就, 藝術融合, 融合藝術, 跨學科藝術教育, 語言藝術, 藝術教育, 溝通

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**Zusammenfassung** (AnnRené Joseph: *Kunst und akademische Leistung - Empirischer Beweis für Kunstwirklichkeiten im Bildungsrecht der Vereinigten Staaten und in der Welt*): Dass die Künste die akademische Leistung verbessern, ist ein Anspruch der Pädagogen für das letzte Jahrhundert. Diese experimentelle Studie untersuchte, ob und inwieweit der Einsatz kreativer dramatischer Interventionen die Vokabularleistung von Schülern der vierten Klasse in einem Sprachkunstunterricht erhöht. Die 20-tägige Studie wurde über fünf Schulwochen hinweg für 45 Minuten pro Tag durchgeführt - während des normalerweise geplanten Unterrichtsblocks für Sprachkunst. Es beinhaltete einen Pretest, 17 aufeinander folgende Schultage Unterricht und einen Posttest. Fünf Wochen später wurde ein Retentionstest durchgeführt. Drei Lehrer der vierten Klasse wurden nach dem Zufallsprinzip einer Stichprobe von 83 Viertklässlern zugeordnet. Die Studie wurde an einer Lese- und Mathematikschule des Learning Assistance Program (LAP) in einem großen ländlichen Schulbezirk im Bundesstaat Washington durchgeführt. Beschreibende Statistiken wurden verwendet, um die Demographie der Stichprobe zu beschreiben (...) inferentielle Statistiken wurden verwendet, um die Unterschiede zwischen den Gruppen zu berechnen. (Joseph, 2013/2014, S. 2-3)

**Stichworte:** kreative Dramatik, Vokabularerfolg, Kunst und akademische Leistung, Kunstintegration, integrierte Kunst, interdisziplinäre Kunstausbildung, Sprachkunst, Kunstpädagogik, Kommunikation

\* \* \*

**Аннотация** (АннРене Йозеф: *Искусство и академическая результативность – примеры встраивания концептов художественной действительности в образовательном праве США и других странах*): Тот факт, что разные виды искусства улучшают академические достижения, является стимулирующим и мотивирующим фактором для современных педагогов. В данной работе, основанной на эксперименте, исследуется, расширяется ли вокабуляр учеников четвертого класса на занятиях художественного мастерства за счет использования креативных художественных профилей, и если расширяется, то в какой степени. Исследование, длившееся в первой фазе 20 дней, было продолжено по прошествии 5 школьных недель. На проведение исследования ежедневно отводилось 45 минут. Ориентиром были занятия по художественному мастерству. По структуре это выглядело следующим образом: претест, 17 следующих друг за другом занятий и посттест. Спустя пять недель был проведен так наз. квалификационный тест. Три педагога, преподающих в четвертом классе методом случайной выборки были определены к группе испытуемых, к которым относились четвероклассники (83 человека). Исследование проводилось в школе чтения и математики в рамках обучающей программы LAP в одном из крупных сельских школьных округов штата Вашингтон. Использование дескриптивной статистики было необходимо для описание демографии выборки; инференциальная статистика применялась для того, чтобы рассчитать индексы различия между группами испытуемых. (Joseph, 2013/2014, S. 2-3).

**Ключевые слова:** креативная драматургия, успех в освоении вокабуляра, искусство и академические достижения, художественная интеграция, интегрированное искусство, междисциплинарная профессиональная подготовка по направлению «Искусство», художественное мастерство, художественная педагогика, коммуникация.

## Introduction

*The Effects of Creative Dramatics on Vocabulary Achievement of Fourth Grade Students in a Language Arts Classroom: An Empirical Study* (Joseph, 2013/2014<sup>1</sup>; 2014, 2019), provides statistical significance as to how creative dramatics strategies improved student scores in vocabulary achievement in an experimental design research study. This article was created specifically for the *IDE-Online Journal (International Dialogues on Education: Past and Present)*, and is **a significantly shortened version of the aforementioned dissertation study and results**. It endeavors to illuminate the relevance of the findings to current education law in the United States of America (USA), and further the possibilities it presents internationally for students to experience arts education as a part of basic education for all learners employing the artistic processes of creating, performing, presenting, and responding.

The study is replicable, transferable, and generalizable to other arts and core subjects, while being conducted during the school day—and adaptable around the world. Arts for 'art's sake', integrated arts (dance, music, theatre, and visual arts), and arts in the content areas (arts integration), are included in the interventions for the two treatment groups, which outscored the control group on district language arts basal mandated vocabulary words as measured by the dependent variable (DV) —a teacher and researcher-designed 31-question criterion-referenced multiple choice vocabulary test.

The article narrative, tables, and figures presented are taken from the published dissertation and available for download and citing through the *Seattle Pacific University (SPU) Library Digital Commons at SPU Dissertations and Theses*<sup>ii</sup> database. Six endnote references to this study illumine key resources of the article purposes. The statistically significant findings of this empirical study support the claim of causal effects for arts education processes and academic achievement.

## Theoretical Basis of the Study

***Purpose and Rationale for Creative Dramatics and Vocabulary Achievement.*** The purpose of the aforementioned experimental study was to examine the effects of creative dramatics interventions on the vocabulary achievement of fourth grade students in a language arts classroom. Stahl and Nagy (2006) gave rationale for this examination, stating, “Our vocabulary, even more than our accent, gives away our social and educational background. As a major factor in determining what we can understand, it opens or closes access to sources of information that will impact our future” (p. 3). They further stressed, “Perhaps one of the most important reasons why teachers need to pay attention to vocabulary is that vocabulary knowledge is cumulative. The more words you know, the easier it is to learn yet more words” (Stahl & Nagy, 2006, p. 6). Additional rationale for such a study that included creative dramatics as a means to develop and promote vocabulary development in a multi-cultural and low income school environment, was provided by McMaster (1998) in the following statement:

Drama is an invaluable tool for educators because it is one of the few vehicles of instruction that can support every aspect of literacy development. Drama encompasses all four of the language arts modalities and is an effective medium for building decoding, vocabulary, syntactic, discourse, and metacognitive knowledge. Drama activities encourage the affective aspects of reading and emergent literacy, accomplishing this within a valuable social context. Drama begins with the concept of meaningful communication and provides multiple opportunities for social interaction and feedback. These interactions offer the kind of support Vygotsky (1978) deems necessary for internalizing new knowledge. Above all, drama activities are extremely effective in fostering a community of learners who choose to participate in independent reading activities. (pp. 574-575)

Importantly, the arts, defined in Washington State as dance, media arts, music, theatre, and visual arts (Office of Superintendent of Public Instruction [OSPI], n.d.); are considered part of basic education for all students in Washington State education law; and listed as such in the Revised Code of Washington (RCW) 28A.150.210 since 1993 (Washington State Legislature [WSL], 1993). Further, two credits for the arts are required for high school graduation, beginning with the freshman class of 2015—in effect for the graduating class of 2019, per the Washington Administrative Code (WAC) 180-51-068 (Washington State Legislature [WSL], 2014). Parents in Washington State should expect access to arts educational opportunities for their children in all public schools in the state—grades kindergarten through high school.

Alarming, is that although the arts (including creative dramatics) are part of basic education since 1993 in Washington State, the time that students receive instruction in creative dramatics is minimal—if at all

(Parsad & Spiegelman, 2012). Supplementary, a recent 2018 on-line report about the amount of arts education (dance, media arts, music, theatre, and visual arts) in 20 King County school districts in Washington State specified that while 57.7% of all King County high school students were enrolled in an arts class, only 5.3% of those students participated in theatre instruction (Illuminate Evaluation Services, LLC, 2019<sup>iii</sup>).

## Research Questions

This study examined the effects of creative dramatics interventions on the vocabulary achievement of fourth grade students in a language arts classroom and involved four research questions. This article will focus on examining the effects of researched and sustained creative dramatics interventions by answering research question four, following:

**Question 4.** Is there an interaction effect between the time and condition (time = pretest, posttest, and retention test administrations), and condition (condition = creative dramatics and vocabulary words [CDVW], creative dramatics and story retelling enactments [CDSR], and control group [CG]), to strengthen the vocabulary achievement in fourth grade students in a language arts classroom, as measured on a criterion-referenced vocabulary test of the language arts unit of study?

The answers, statistical analyses, and results regarding question four follow via the narrative, terms and definitions, tables, and figures provided from the study dissertation. Should the study be replicated, question four should drive the inquiry of the investigation.

## Historical Context

This study addressed the gap in previous empirical research that examined any causation between creative dramatics and vocabulary achievement (Podlozny, 2000). Specifically, the examination of creative dramatics (arts education) as a 'process versus a product' needed clarity and detailed example for future researchers (Conard, 1992). The necessity of such a study was stressed by Winner & Hetland (2000) who cited such a need and concluded, "Research demonstrating a causal role for the arts (whether this role is direct or indirect) must be experimental in design" (p. 5). They stressed, "True experimental research, with random assignment of students and teachers to arts vs. control classrooms, is very difficult to carry out in the real world of schools" (ibid.).

**Connection to United States Every Student Succeeds Act (ESSA) Title I Part A.** Significant, this study meets the requirements of *ESSA: Title I Part A, Sections 1008-1009* (United States Department of Education [USDOE], 2015<sup>iv</sup>), representing strong empirical evidence to advocate for arts instruction and access to all learners during the school day in innovative ways as defined in the federal education law. Jones (2018/2019) categorized research summaries from the *Arts Education Partnership* (AEP), peer reviewed *ArtsEdSearch* database, and assigned qualifying summaries of studies to the tiers of research required for application funding in *ESSA* (USDOE, 2015), resulting in the report *ESSA: Mapping Opportunities for the Arts* (Jones, 2018/2019<sup>v</sup>). This study was cited as a *Tier 1* (empirical study) in that report as follows:

The Effects of Creative Dramatics on Vocabulary Achievement of Fourth Grade Students in a Language Arts Classroom: An Empirical Study<sup>vi</sup> (Potentially Tier 1). This experimental study explores the impact of a drama-integration program on language development for fourth-grade students. The study found that students participating in the program demonstrated better vocabulary acquisition than those who did not participate in the program. (Jones, 2018/2019, p. 29)

Nationally, schools and districts may cite the results of this study as empirical research to support a schoolwide program plan of accountability to use arts education strategies to improve instructional opportunities for academically at-risk students. These types of schoolwide plans provide arts instruction for all students—arts for art’s sake, integrated arts, and arts in the content areas.

## Review of Literature

Empirical studies with regards to creative dramatics and vocabulary achievement—over the last 69 years—continue to be rare, if at all (Joseph, 2013/2014, 2014, n.d.; Mages, 2008; Podlozny, 2000, 2001; Winner & Cooper, 2000; Winner, Goldstein, & Vincent-Lancrin, 2013a, 2013b; Winner & Hetland, 2000, 2001a, 2001b, 2002). Such strict experimental designs are difficult to conduct partly due to the nature of human and environmental inconsistencies of a school environment, and partly due to replicable practices.

Interestingly, results from research studies regarding creative dramatics or any drama-based methodologies with linkages to literary arts—whether quantitative, qualitative, or mixed

methods—continue to show positive effects. A meta-analysis of 35 studies regarding the effects of drama-based pedagogies over the past 30 years (1985-2015) was recently conducted by Lee, Enciso, and Brown (n.d.). The authors specified, “All studies included in this review compare an intervention group to a control/comparison group” (Lee et al., p. 15); albeit, most were qualitative in nature and involved mixed-methods or non-replicable qualitative research designs. This present study was included as an empirical study, and one of only two studies published during 2013 regarding drama-based pedagogies meeting the aforementioned criteria for inclusion in their meta-analysis.

Further, a recent book by Eddy (2016) echoed three key challenge areas discussed in this study: promoting the value of creative dramatics and movement; ensuring sustained and on-going instruction in the midst of budget and academic testing limitations on school day schedules; and referencing the need for empirical and quantitative research conducted during the school day, to validate arts (creative dramatics) education as part of basic education and essential to all learners.

Consequently, this study meets the requirements that can be used in *ESSA’s* definitions for methods in the arts to be utilized with students under *Title I, Part A* of the *ESSA*, and supported by state and federal laws, policies, and practices (Jones, 2018/2019; Lee et al., n.d.; Ludwig, Boyle, & Lindsay, 2017; OSPI, n.d.; USDOE, 2015; U.S. Department of Education and its Institute of Education Sciences [IES], U.S. Department of Education, National Center for Education Statistics, Common Core of Data [CCD], 2010; WSL, 1993, 2014).

## Terms and Definitions

The following terms, as defined in the study, are specifically defined with intention, for generalization of a pathway for future researchers. Explicit definitions were researched, further defined, and employed in direct response to recommendations of previous researchers of the arts who cited unclear and unreliable practices and definitions. The study terms and definitions provide clarity, specification, and common vocabulary in discussion of the results and regarding future quantitative replication or adaptation, as well as qualitative and mixed-method studies regarding creative dramatics and vocabulary achievement (Arts Education Partnership [AEP], 2002; Conard, 1992; Gray, 1987; Massey & Koziol, 1978; Podlozny, 2000, 2001; Somers, 2001; Vitz, 1983; Winner & Hetland, 2000). A detailed list of all terms used in the dissertation is provided in Appendix B. An alphabetical list of terms and definitions

for this article that specifically address the research question follow and are provided as cited by organizations, resources, or authors, and for further interest of readers.

### **The Arts in Washington State.**

The arts are core subjects at both the state and federal levels. Washington defines the arts as the unique five disciplines of dance, media arts, music, theatre, and visual arts. The arts teach to the whole child, engage all learning styles, and lead to the development of powerful learning habits that include such essential 21st Century Skills as creativity, collaboration, communication, and critical thinking. The arts also provide students with keys to understanding the world around them and an array of strategies for learning, interpreting, and expressing their thoughts. (OSPI, n.d., p.1)

**Arts Integration – Referred to as “Interdisciplinary Arts” or “Arts in the Content Areas.”** Arts integration, also referred to as interdisciplinary or integrated teaching, refers to one subject specifically focused on benefitting the other; whereas, the outcomes of one subject are promoted at the expense of the other subject (Brophy & Alleman, 1991; Cawthon & Dawson, 2011; Fogarty, 1991; Russell-Bowie, 2009, p. 5). Ellis and Fouts (2001) described interdisciplinary curriculum as one “aimed at helping students to find connections between subjects and to use different ways of knowing” (p. 22). Bresler (1995) defined interdisciplinary instruction as “maintaining traditional subject boundaries while aligning content and concepts from one discipline with those of another” (p. 31).

**Creative Dramatics.** “Creative dramatics is a dramatic enactment (led by the teacher) of a story, setting, and/or characters. This is an experiential, process-based activity, not a performance for an audience. The teacher may assume a role” (OSPI, 2011d/2014d). Creative dramatics synonymously incorporates the terms classroom drama, creative drama, and drama.

**Integrated Arts (Dance, Music, Creative Dramatics, and Visual Arts).** Integrated arts are the natural tendency for one or more arts (dance, music, theatre, and visual arts) to embed with the other, as in dancing to music, or acting and singing to music, or drawing to music, as in an interdisciplinary curriculum; however, specific to the arts disciplines (Cave, 2011; Gilbert, 2006).

**Language Arts.** “All four of the major language arts – listening, speaking, reading, and writing – are involved in creative drama” (Ross & Roe, 1977, p. 383).

**Readers’ Theatre.** “Readers’ theatre is an orchestrated reading that relies primarily on vocal characterization and does not include the elements of visual theatre, such as costuming, sets, or blocking in the presentation (OSPI, 2011d/2014d, p. 137).

**Vocabulary.** “Vocabulary refers to students’ knowledge of word meanings” (Stahl & Nagy, p. 3).

## **Generalization and International Considerations**

In order to isolate and examine the effects of creative dramatics on vocabulary achievement, a quest for a generalizable school and district population; as well as a district language arts program that integrated with the arts was sought. Interviews with school district and building leadership, as well as grade level teachers from grades three to five commenced (Dupont, 1992). Issues discussed in these interviews included finding a location that would allow an experimental study with a researcher on site for the duration of the study and observing in the classrooms. Teachers were asked to participate in training with the researcher and employ the creative dramatics treatments learned on a daily basis with their students while being observed by the researcher. Lesson plans and treatment strategies were developed by the teachers and researcher, and integrated with the district’s expectations and in further

alignment with district, state, and national standards of learning. There was no cost to the school district, and the three participating teachers received a continuing education credit from the sponsoring university—in this case—Seattle Pacific University in Seattle, Washington State, USA.

Thus, the study occurred during the school day, for an entire grade level of fourth graders in a Learning Assistance Program (LAP) school in Washington State. Confidentiality agreements for the district, school, teachers, and students were required (see Appendices G, J, and R).

The study examined if, “Instruction in the arts when integrated with academic instruction, might result in greater academic improvement than does academic instruction without the arts” (Winner & Hetland, 2000, p. 6). Further, during this era of educators utilizing the arts for what they can do for other core subjects, this investigation examined the effects of the process of researched and sustained creative dramatics interventions that incorporated arts (dance, music, theatre [creative dramatics], and visual arts) for “art’s sake, integrated arts (dance, music, theatre [creative dramatics] and visual arts), and arts in the content areas (arts integration with language arts [vocabulary achievement]). These treatments occurred during the 15-20 minutes of prescribed daily treatments, during the 45 minute language arts block in the normal school day, and for the 17 consecutive school days of the study. Further, three days were added for the pretest, posttest, and retention test, resulting in a 20-day study. The 83 fourth grade students were randomized, as were the three fourth grade teachers. The study treatments were further aligned with Washington State’s reading and arts learning standards (OSPI, 2004, 2011a/2014a, 2011b/2014b, 2011c/2014c, 2011d/2014d, 2011e/2014e).

This detailed pathway for examination, replication, and generalization of the results is difficult; yet, doable. The experimental design provided initial research of such purpose and process examining the effects of creative dramatics on vocabulary achievement. Specifically, three randomized teachers provided the creative dramatics treatments to their 83 randomized fourth grade students in a low socio-economic status (SES) school population.

Descriptive statistics further described the demographics of the student sample, and inferential statistics were used to calculate the differences between groups. The study school site was classified as a full Learning Assistance Program (LAP) school, with focus areas in reading and math, which classified 100% of the population as “at-risk.”

**Generalizability.** The requirements of *ESSA: Title I Part A, Sections 1008-1009* replace the previous United States education law enacted in 2002 and entitled, *No Child Left Behind [NCLB], Arts in Education, Subpart 15, Section 5551* (United States Department of Education [USDOE]. *No Child Left Behind [NCLB]*, 2002; USDOE, 2015). Specifically, *ESSA: Title I Part A, Subpart 1, Section 1008* addresses schoolwide programs and plans that may incorporate arts education strategies to improve learning opportunities for all students (Jones, 2018/2019, p. 3; USDOE, 2015). Further, *ESSA: Title I Part A, Subpart 1, Section 1009* addresses targeted assistance schools; whereas, “schools that do not meet the poverty threshold for schoolwide schools can use *Title I* funding to create programs targeted to help academically at-risk students meet the state’s academic standards” (Jones, 2018/2019, p. 4; USDOE, 2015).

Noteworthy, the student sample in this study met the requirements for both of the aforementioned subparts, with over 40 percent of the students being confidentially identified as coming from low-income families; whereas, 52.6% of the fourth grade students, in the present study, were classified as “at-risk” for academic achievement due to the social-economic status (SES) of their family which is a higher percentage of SES qualifiers than the study school, study district, and state percentages, providing generalizability to other schools and districts.

Purposefully, this article summarized the aforementioned study and the generalizability it affords to the current federal law; creative dramatics and vocabulary research; as well as the implications the study creates for arts educational opportunities for students in Washington State; as well as, nationally and internationally (OSPI, n.d.; Podlozny, 2000; USDOE, 2015; Winner et al., 2013a, 2013b).

The national and international implications for generalizability regarding the results of this study are significant to educational practices and arts education; whereas, one academic subject—the arts (which includes creative dramatics) —could positively impact another academic subject—language arts (which includes vocabulary achievement). Furthermore, the possibilities this empirical research study affords to national and international students in obtaining a ‘well-rounded education’ in the development of a whole child (which includes the arts) are enhanced. The generalizability of the abovementioned study and student demographics is reported in Table 1, following, and provides further evidence for the claims of this article.

Table 1: *Academic “At-Risk” Factor Free and Reduced Price Lunch Comparison Chart for Study Grade Level, Study School, Study School District, and Washington State – 2011-2012*

	Percent of Free and Reduced Price Lunch for 4 <sup>th</sup> Grade Students at Study School	Percent of Free and Reduced Price Lunch for Grades K-6 Students at Study School	Percent of Free and Reduced Price Lunch for K-12 Students in Study School District	Percent of Free and Reduced Price Lunch for K-12 Students in Washington State
Total Number of Students in each Category	N = 91	N = 651	N = 17, 622	N = 1, 043, 905
Percentage of Students in each Category Qualifying for Free/Reduced Price Lunch (SES)	52.6%	50.3%	42.8%	45.5%

*(Source: Source for Demographic Descriptors: OSPI Report Card Summary 2011-2012, retrieved from <http://reportcard.ospi.k12.wa.us/summary.aspx?year=2011-12>. The N = 91 represents the entire 4<sup>th</sup> Grade of the study school, including eight English Language Learners [ELL] students not included in study N = 83).*

## Research Design and Method

This investigation of creative dramatics instruction and its effects upon the vocabulary achievement of fourth grade students in a language arts classroom consisted of a 20-day study, with a randomized pre-test-posttest control-group design and a five-week follow-up retention test (Campbell & Stanley, 1963; Gall et al., 2007). The dependent variable was a teacher-researcher developed criterion test, based upon the 31-vocabulary words that were expected and required of all fourth graders in the study school district’s adopted language arts curriculum: *Theme 2: American Stories: Focus on Plays* (Hough-

ton Mifflin Reading, 2005). The study treatments were taught to each individual teacher, by the researcher, for one 30 minute training block, and in compliance with their district contract. Following, Table 2 presents a diagram of the experimental design study.

Table 2: *Pretest-Posttest Control Group Design*

Group	Pretest	Treatment	Posttest	Retention Test
R <sub>1</sub>	O <sub>1</sub>	X <sub>1</sub>	O <sub>2</sub>	O <sub>3</sub>
R <sub>2</sub>	O <sub>4</sub>	X <sub>2</sub>	O <sub>5</sub>	O <sub>6</sub>
R <sub>3</sub>	O <sub>7</sub>	Control	O <sub>8</sub>	O <sub>9</sub>

(Sources: Campbell & Stanley, 1963, p. 13; Gall et al., 2007, p. 398).

- R<sub>1</sub> = Randomly assigned experimental group I
- R<sub>2</sub> = Randomly assigned experimental group II
- R<sub>3</sub> = Randomly assigned control group

## Description of the Student Sample N = 83

The student sample for the study was evenly distributed between the three fourth grade classrooms by number of students in each group, and by gender of the student sample  $N = 83$ ; resulting in an equal number of males  $n = 41$  and females  $n = 42$ , and illustrated in Table 3, following.

Table 3: *Gender by Fourth Grade Treatment Group N = 83*

	Total Students in the Study		Total
	Male	Female	
Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	13	15	28
Experimental Group II (Creative Dramatics and Story Retelling [CDSR])	14	13	27
Control Group (CG)	14	14	28
<b>Total</b>	<b>41</b>	<b>42</b>	<b>83</b>

While the equality of groups for this empirical study was met and provided strength for the outcomes that will be shared, it may be seen as a limitation in replication and generalizability of the results. Two students enrolled after the study began—after the pretest—and prior to the posttest and retention test; thus, making the total student sample  $N = 83$ . These students were both female, and intentionally assigned into Experimental Group II, and to the Control Group, to keep the class sizes equal, and in honor of the district contractual obligations regarding student class-sizes. Beneficial and unusual for this type of school population, no students withdrew during the study. Individual differences of the students, including exceptionalities, special needs, and the listwise sample descriptions for the listwise pretest

and posttest  $N = 76$ ; as well as the listwise pretest-posttest and retention test  $N = 68$  are further detailed in Chapter Three and in the tables included in this article. As reported in the generalizability Table 1 of this article, eight fourth grade students received pull-out English Language Learning (ELL) instruction during the language arts block and were not involved in the study.

Following, in Table 4, are the race and ethnicity by classroom condition for the fourth grade student sample  $N = 83$ .

Table 4: *Race and Ethnicity Statistics by Treatment Group N = 83*

	White	Asian	American Indian/ Alaskan Native	Black	Asian/ Pacific Islander	Two or More Races
Experimental Group 1 (CDVW) $n = 28$	22	2	3			1
Experimental Group II (CDSR) $n = 27$	19	2	2	2	1	1
Control Group (CG) $n = 28$	14	4	5	3		2
<b>Total <math>N = 83</math></b>	<b>55</b>	<b>8</b>	<b>10</b>	<b>5</b>	<b>1</b>	<b>4</b>

*(Source: Source for Demographic Descriptors: OSPI Report Card Summary 2011-2012, retrieved from <http://reportcard.ospi.k12.wa.us/summary.aspx?year=2011-12>).*

Further, Table 5, following, defines the student sample, and illustrates the homogeneity, generalizability, and academic risk factors of the student sample  $N = 83$ .

Table 5: *Academic "At-Risk" Factor by Treatment Group N = 83*

	ELL	Special Educa- tion	McKinney- Vento (Homeless)	Free/Reduced Lunch	Total
Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW]) <i>n</i> = 28	2			13	15
Experimental Group II (Creative Dramatics and Story Retelling [CDSR]) <i>n</i> = 27			2	11	13
Control Group (CG) <i>n</i> = 28		1		11	12
<b>Total N = 83</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>35</b>	<b>40</b>

*(Sources: Source for Demographic Descriptors: OSPI Report Card Summary 2011-2012. Retrieved from <http://reportcard.ospi.k12.wa.us/summary.aspx?year=2011-12>. Source for number of students qualifying for state demographic descriptors was the study school secretary, as student data and names for SES are confidential in Washington State).*

## Dependent Variable

The dependent variable was designed during the fourth grade teachers' Professional Learning Community (PLC) time (Soine, 2011); whereas, the three fourth grade teachers, in consultation and review by the researcher, and approval of the school district and school principal, created the test to measure the 31-vocabulary words that were to be learned in the four stories of the district prescribed language arts basal unit (Houghton Mifflin Reading, 2005). Further, the criterion-referenced multiple choice vocabulary test design met current research on effective practices and assessment of such (Black & Wiliam, 1998; Holcomb, 1999; McMillan, 2007; Taylor & Nolen, 2005, 2008; Wiggins, 1998; Wiggins & McTighe, 2005).

**Dependent Variable Reliability.** Two internal consistency estimates of reliability were computed for the dependent variable, a teacher and researcher-designed 31-question criterion-referenced multiple choice vocabulary test. Reliability of the dependent variable was tested and reported as satisfactory, and the reliability indexes are provided in Appendix K (Cronbach, 1951, 1982; Field, 2009; Green, Salkind, & Akey, 2000; Green & Gundersheim, 2010; Nunnally & Bernstein, 1994; Vogt, 2005).

**Dependent Variable Validity.** The dependent variable was a formative assessment design that followed the recommendations for a valid and reliable instrument and instrumentation development structure for research regarding creative dramatics and academic achievement. Specifically, the 31-

vocabulary words measured were only those words that would be required to be measured in the four stories in the specific unit of study—as opposed to other vocabulary words and variables not being investigated in the study—thus measuring only what was expected (Conard, 1992; Galda, 1982; Kardash & Wright, 1987; Mages, 2008; Massey & Koziol, 1978; Pellegrini, 1984; Pellegrini & Galda, 1982; Podlozny, 2000; Vitz, 1983, 1984; Wagner, 1998; Winner & Cooper, 2000; Winner & Hetland, 2000).

**Power Analysis.** Further, the following table illustrates the total number of students present for each test administration of the dependent variable. As stated earlier, the total number of fourth graders was  $N = 81$  at the start of the study; whereas, two students enrolled during the study; thus, creating a total  $N = 83$ . No students withdrew during the study. The listwise pretest-posttest attendees were  $N = 76$ ; whereas, the listwise pretest-posttest and retention test attendees were  $N = 68$ . All data regarding student attendance and listwise calculations met the power analysis requirements for an  $N = 51$ , recommended by Gall et al. (2007, p. 142-145), and needed for statistical significance at the confidence level of  $p < .05$  resulting in a possible statistical power at the .7 level for a large effect size. This data is illustrated in Table 6, following.

Table 6: *Pretest, Posttest, and Retention Test Dates Student Enrollment and Student Attendees*

	Pretest November 1, 2011	Posttest December 1, 2011	Retention Test January 3, 2012
Total $N$ Enrolled by Test Administration	$N = 81$	$N = 83$	$N = 83$
Total $N$ Present by Test Administration	$N = 79$	$N = 80$	$N = 75$

## Study Schedule

The study required 19 consecutive days of school time, across five weeks. The pretest was the first day, the posttest was day nineteen, and the retention test was day 20, and occurred five weeks following the posttest, and on the day after students returned from a two-week December holiday vacation.

This study rotated the times that teachers incorporated the study treatments, as the researcher observed the treatments in each classroom, daily, during a 15-20 minute agreed upon time the treatment was taught and experienced by the students. Each week of the study, the three teachers would teach the treatment either at the beginning, in the middle, or during the last part of the daily 45 minute language arts block. This allowed the researcher to observe each teacher and their students on a daily basis, at the scheduled time, and to ensure treatment fidelity. A detailed graphic organizer illustrating the study on one page is available in Appendix V, and was created to answer questions future researchers may have regarding the study parameters.

Following is a detailed schedule of the study time-line provided in Figure 1. It illustrates the schedule calendar in a pictorial format of the 20-day and five-week study; and illumines the months leading up to the study needed to interview and find a school district and school site; as well as to submit paperwork to the university Institutional Review Board (I.R.B.) for approval, and to secure advisor approval for the study to proceed with the proper supports in place.

**Study Schedule Calendar: Pre-Study Approval, Lesson Plans, Criterion-Referenced Test, Random Assignment, Teacher Training – 20-Day Study – Fall 2011**

Monday	Tuesday	Wednesday	Thursday	Friday
<b>July 12, 2011</b> Met with district administration to present and gain proposal approval.		<b>September 28, 2011</b> Met with teachers and principal at study school.		
		<b>October 12, 2011</b> Submitted SPU IRB Request and district request to conduct research		<b>October 14, 2011</b> District approval to conduct research at study school site.
<b>October 17-19, 2011</b> Teacher PLC time to draft 5-week lesson plan and criterion-referenced test.		<b>October 19, 2011</b> Researcher received draft lesson plans and criterion-referenced test. <b>October 26, 2011</b> IRB Approval	<b>October 27, 2011</b>  Random assignment of classes and training of teachers.	<b>October 19-28, 2011</b> Refinement of Lesson Plans and Criterion-Referenced Test by Researcher

<b>November 2011: 19 Consecutive School Days of Study and Five-Week Retention Test Follow-Up</b>				
Monday	Tuesday	Wednesday	Thursday	Friday
<b>October 31, 2011</b>	<b>November 1, 2011</b> Pretest Study Begins	<b>2 – Treatment</b>	<b>3 – Treatment</b>	<b>4 – Treatment</b>
<b>7 – Treatment</b>	<b>8 – No Treatment</b> District in-service	<b>9 – Treatment</b> Two Subs Exp. Group II Control Group	<b>10 – Treatment</b> Two Subs Exp. Group II Control Group	<b>11 – No School</b> Veteran’s Day Holiday
<b>14 – Treatment</b>	<b>15 – Treatment</b>	<b>16 – Treatment</b>	<b>17 – Treatment</b>	<b>18 – Treatment</b> Two Subs Exp. Group II Control Group
<b>21 – Treatment</b>	<b>22 – Treatment</b> Three Subs Exp. Group I Exp. Group II Control Group	<b>23 – Treatment</b>	<b>24 – No School</b> Thanksgiving Day	<b>25 – No School</b> Thanksgiving Break

<b>28 - Treatment</b>	<b>29 - Treatment</b>	<b>30 - Treatment</b>	<b>December 1, 2011 Posttest Study Ends</b>	<b>December Winter Break Dec. 19-30, 2011</b>
<b>January 2, 2012</b>	<b>January 3, 2012 Retention Test</b>			

Figure 1. Study Schedule Calendar: Calendar Pictorial Format of Five Week Study

The details of the study treatment interventions follow in Figure 2. The treatment interventions were developed by the researcher from multiple sources of successful studies, pedagogy, methodology, philosophical, social, and emotional underpinnings regarding arts education as a cognitive process of 'learning by doing', play, and experience (Adler, 1994; Booth, 2007; Bruner, 1966; Dalcroze, 1930; Dewey, 1934; Duffelmeyer & Duffelmeyer, 1979; Edwards, B., 1979; Edwards, C., 1972; Eisner, 1998; Ellis, 2001; Gilbert, 2006; Himmele & Himmele, 2011; Houghton Mifflin Reading, 2005; Kodály, 1974; Laban, 1971; Montessori, 1917; OSPI, 2011a/2014a, 2011b/2014b, 2011c/2014c, 2011d/2014d, 2011e/2014e; Orff, 1974/1980; Piaget, 1962; Richards, 1967; Siks, 1958; Smilansky & Shefatya, 1990; Steiner, 1997; Sternberg, 1997; Vygotsky, 1966; Ward, 1930; Zull, 2002). Further, the treatment interventions were written in intricate detail and cited. They are available in Appendix C for future researchers and teachers; as well as for national and international generalizability. The '*Bravo X Strategy*' is a strategy developed by the researcher, and was part of the daily treatment for the CDVW treatment group, and also detailed in Appendix C of the study.

#### Summary of Study Intervention Strategies, Minutes, and Hours

	<b>N</b>	<b>Study Treatment</b>	<b>Teacher Absence</b>	<b>Amount of Treatment at 15 Minutes Per 17 Days = 255 Minutes = 4 Hours and 15 Minutes</b>	<b>Amount of Treatment at 20 Minutes Per 17 Days = 340 Minutes = 5 Hours and 40 Minutes</b>
<b>Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])</b>	28	<b>Warm-up:</b> ' <i>Bravo X strategy</i> ' Singing/saying "hello"; <b>Treatment:</b> Singing and acting out vocabulary words and definitions with creative dramatics; acting out vocabulary words in story reading <b>Summary:</b> Story summary book-	1	240 minutes = 4 hours  Creative Dramatics and Vocabulary Words treatment	320 minutes = 5 hours and 20 minutes  Creative Dramatics and Vocabulary Words treatment

		lets with sketch drawings and narrative			
<b>Experimental Group II (Creative Dramatics and Story Retelling [CDSR])</b>	27	<b>Warm-up:</b> BrainDance with metaphor movements <b>Treatment:</b> Enact and re-enact stories with creative dramatics <b>Summary:</b> Story re-enactments	4	195 minutes = 3 hours and 15 minutes  Creative Dramatics and Story Retelling treatment with story scene strips	260 minutes = 4 hours and 20 minutes  Creative Dramatics and Story Retelling Treatment with story scene strips
<b>Control Group (CG)</b>	28	<b>Warm-up:</b> Silent Reading <b>Treatment:</b> <i>Readers' theatre</i> story retelling <b>Summary:</b> "I learned" reflection journals	4	195 minutes = 3 hours and 15 minutes =  110 minutes of <i>Readers' theatre</i> plus 85 minutes of reflection journals	260 minutes = 4 hours and 20 minutes =  175 minutes of <i>Readers' theatre</i> plus 85 minutes of reflection journals

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Figure 2. Summary of Study Intervention Strategies, Minutes, and Hours

## Description of the Creative Dramatics Treatments for Three Randomly Assigned Fourth Grade Classrooms N = 83

All three study groups (two treatments and one control) experienced treatments steeped in researched and proven theory and practice, including arts education methods, philosophy, and pedagogy. To avoid the *John Henry effect* or *Hawthorne effect* (Gall et al., 2007; Houghton Mifflin Reading, 2005; Kardash & Wright, 1987; OSPI, 2004, 2011a/2014a; Vogt, 2005), all three teachers believed they were giving creative dramatics treatments in alignment with state learning standards in the arts and language arts, as well as meeting their school and district learning expectations. These creative dramatics treatments follow, as were illustrated in Figure 2, above. Teacher training of the study treatments and the random assignment of teachers are detailed in Appendices C, D, and E, along with references as to the methodology, pedagogy, and philosophical underpinnings of the treatments. Details of the three experimental groups follow:

**Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW).** The treatment interventions for the Experimental Group I – Creative Dramatics and Vocabulary Words (CDVW) included teaching the required vocabulary words with creative dramatics movements, while rhythmically singing and chanting the vocabulary words and their definitions through creative dramatics with pantomime to represent the words. Students copied, echoed, and mirrored the teacher’s movements and rhythm patterns for the vocabulary word syllables initially, as well as initiated movements that could

be incorporated by all of the student participants. All students in Experimental Group I participated in the creative dramatics improvisations of each of the 31 vocabulary words and each of the 31 vocabulary word definitions.

**Experimental Group II – Creative Dramatics and Story-retelling (CDSR).** The treatment interventions for the Experimental Group II – Creative Dramatics and Story-retelling (CDSR) included teaching the required vocabulary words with creative dramatics through story retelling enactments (CDSR); whereas, students volunteered or were assigned to enact the story scenes in small groups and stress the vocabulary words in their narrative, as they enacted the scenes in small groups, one-by-one, thus retelling the story through creative dramatics improvisation of narrative and actions, and through involvement of every child in the classroom enacting at least one character per story.

**Control Group (CG).** The creative dramatics intervention for the Control Group (CG) was the *Readers' theatre* strategy already incorporated and recommended for use in the study school district's *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005, p. 181N). It was the intention that each student in the Control Group would be able to read a part of the story by participating in the *Readers' theatre* strategy at least once per week. The Control Group was not a comparison group. Students in the Control Group (CG) learned the vocabulary words and content (four stories) covered during the five-week study, through following the lesson design of the district required language arts unit, co-created by the three study teachers. These students read the same story texts as those in the two creative dramatics treatment classrooms. These students retold the story, utilizing a *Readers' theatre* format as recommended in the study school district adopted language arts curriculum (Houghton Mifflin Reading, 2005). Additionally, these students daily wrote in reflection notebooks following the *Readers' theatre* recommended activities. Reflection papers or notebooks were a recommended strategy of the basal unit.

## Student Sample

The analyses of the study were conducted on the listwise  $N = 76$  pretest-posttest, and the listwise  $N = 68$  for the pretest-posttest and retention test student attendees, and follow. The description and demographics of the student samples of such follow for the purposes of generalizability, international considerations, and regarding clarity and specificity of the findings.

### *Description of the Pretest-Posttest Student Sample Listwise $N = 76$ by Randomly Assigned Classroom Condition.*

Table 7: *Gender by Fourth Grade Treatment Group Comparison Pretest-Posttest Listwise  $N = 76$*

	Students Present for Pretest and Posttest Administrations Listwise $N = 76$		
	Gender		Total
	Male	Female	
Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	12	15	27
Experimental Group II	14	13	27

(Creative Dramatics and Story Retelling [CDSR])

Control Group (CG)	12	10	22
<b>Total</b>	<b>38</b>	<b>38</b>	<b>76</b>

Additionally, the race and ethnicity statistics for the pretest-posttest student participants listwise N = 76, by treatment group follow in Table 8, including the number of student participants present in each classroom condition.

**Table 8: Race and Ethnicity Statistics by Treatment Group Pretest-Posttest Comparison Listwise N = 76**

	White	Asian	American Indian/ Alaskan Native	Black	Asian/ Pacific Islander	Two or More Races
Experimental Group 1 (CDVW) <i>n</i> = 27	21	2	3			1
Experimental Group II (CDSR) <i>n</i> = 27	19	2	2	2	1	1
Control Group (CG) <i>n</i> = 22	12	2	3	3		2
<b>Total</b> <i>N</i> = 76	<b>52</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>4</b>

180

*(Source: Source for Demographic Descriptors: OSPI Report Card Summary 2011-2012, retrieved from <http://reportcard.ospi.k12.wa.us/summary.aspx?year=2011-12>).*

**Description of the Pretest-Posttest and Retention Test Student Sample Listwise N = 68 by Randomly Assigned Classroom Condition.** The retention test was given five weeks following the posttest, and following a two-week December holiday vacation, and the day after students returned from vacation. Some students were still on vacation; which could be considered a limitation factor in the resulting listwise N = 68 for all three test administrations.

Table 9: *Gender by Fourth Grade Treatment Group Pretest-Posttest, Retention Test Listwise N = 68*

	Gender		Total
	Male	Female	
Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	12	14	26
Experimental Group II (Creative Dramatics and Story Retelling [CDSR])	10	11	21
Control Group (CG)	11	10	21
<b>Total</b>	<b>33</b>	<b>35</b>	<b>68</b>

Additionally, the race and ethnicity statistics for the pretest-posttest and retention test student participants listwise N = 68, by treatment group follow in Table 10, including the number of student participants present in each classroom condition.

Table 10: *Race and Ethnicity Statistics by Treatment Group Pretest-Posttest, Retention Test Comparison Listwise N = 68*

	White	Asian	American Indi- an/ Alaskan Native	Black	Asian/ Pacific Is- lander	Two or More Races
Experimental Group 1 (CDVW) <i>n</i> = 26	20	2	3			1
Experimental Group II (CDSR) <i>n</i> = 21	15	1	2	1	1	1
Control Group (CG) <i>n</i> = 21	12	2	2	3		2

Total	47	5	7	4	1	4
<i>N</i> = 68						

*(Source: Source for Demographic Descriptors: OSPI Report Card Summary 2011-2012, retrieved from <http://reportcard.ospi.k12.wa.us/summary.aspx?year=2011-12>).*

## Results and Evaluation of the Analyses

The statistical analyses included, parametric (one-way between-groups ANOVA, one-way repeated measures ANOVA, and mixed between-within subjects ANOVA" (Pallant, 2007; Tabachnick & Fidell, 2013). Furthermore, nonparametric procedures (Kruskal-Wallis, Mann Whitney *U*, and Friedman) were conducted to analyze the data generated by the pretest and posttest gains, and the retention test (re-administration of the pretest and posttest five weeks after the posttest).

The results of the pretest-posttest and pretest-posttest and retention test analyses follow in tables and figures from the dissertation study identifying the analyses and findings.

Tables 11 and 12 and Figure 3, following, illustrate the results of the mixed-between-within subjects ANOVA descriptive statistics comparing the pretest and posttest means gain scores on vocabulary words—by student, with a listwise *N* = 76. Specifically, these results exemplify the comparisons and gains between the three classroom treatment conditions in the study; creative dramatics and vocabulary words (CDVW), creative dramatics and story retelling (CDSR), and the control group (CG). It can be inferred, from the statistics means, that both creative dramatics treatments groups had higher means gains than the control group; whereas, the results of the ANOVA analyses were such that CDVW > CDSR > CG.

Table 11: *Descriptive Statistics for Mixed-Between-Within Subjects ANOVA Comparing Pretest-Posttest Means Listwise N = 76*

Test Administration	Condition	Mean	SD	N/n
<b>Pretest (0-31)</b>	Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	20.19	5.219	27
	Experimental Group II (Creative Dramatics and Story Retelling [CDSR])	19.89	3.238	27
	Control Group (CG)	20.32	4.775	22
	Total	20.12	4.415	76

<b>Posttest (0-31)</b>	Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	28.19	3.126	27
	Experimental Group II (Creative Dramatics and Story Retelling [CDSR])	27.30	2.181	27
	Control Group (CG)	25.18	3.936	22
	<b>Total</b>	<b>27.00</b>	<b>3.298</b>	<b>76</b>

Table 12: *Pretest-Posttest Means Gain Scores Comparisons on Vocabulary Words by Treatment Group*  
 Listwise N = 76

Group	<i>n/N</i> by Group	Pretest-Posttest Means Gains by Student
Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	<i>n</i> = 27	8.0
Experimental Group II (Creative Dramatics and Story Retelling [CDSR])	<i>n</i> = 27	7.41
Control Group (CG)	<i>n</i> = 22	4.86
<b>Total</b>	<b><i>N</i> = 76</b>	<b>6.88</b>

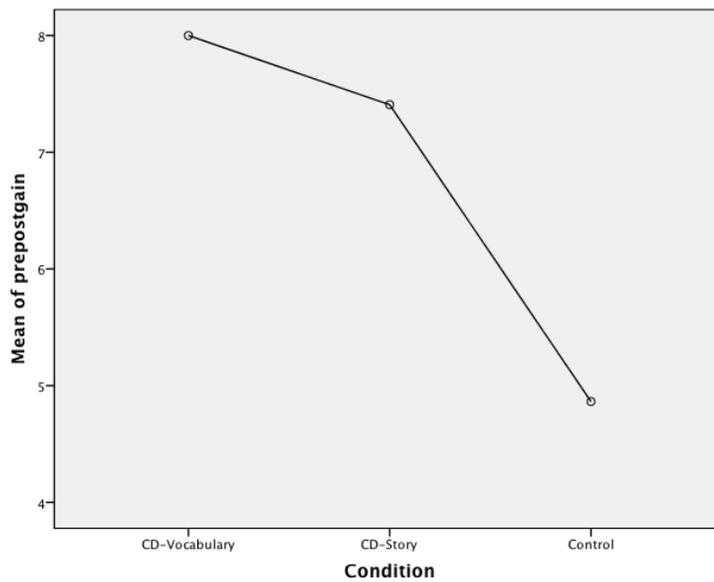


Figure 3. One-Way ANOVA Pretest-Posttest Means Gain Scores on Vocabulary Words Listwise  $N = 76$ .

**Research Question Four Analyses and Answers.** The results were further investigated and analyzed through the use of a mixed between-within subjects ANOVA” (Pallant, 2007; Tabachnick & Fidell, 2013), which measures an interaction effect between *time* and *condition* over time. This procedure was conducted with the pretest-posttest scores with a listwise  $N = 76$ , as shown in Figure 4, and with a listwise  $N = 68$ , as shown in Figure 6. Gains are further illustrated with a Gain Line Graph following in Figure 5 and Table 13 for the listwise  $N = 68$  vocabulary word gains and means for students taking all three test administrations.

The subject mortality from the pretest-posttest to the retention test resulted in unequal group sizes; thus, the use of the Marginal Means or Profile Plots, (Pallant, 2007, p. 261) was necessary, to take into consideration each mean in proportion to its sample size.

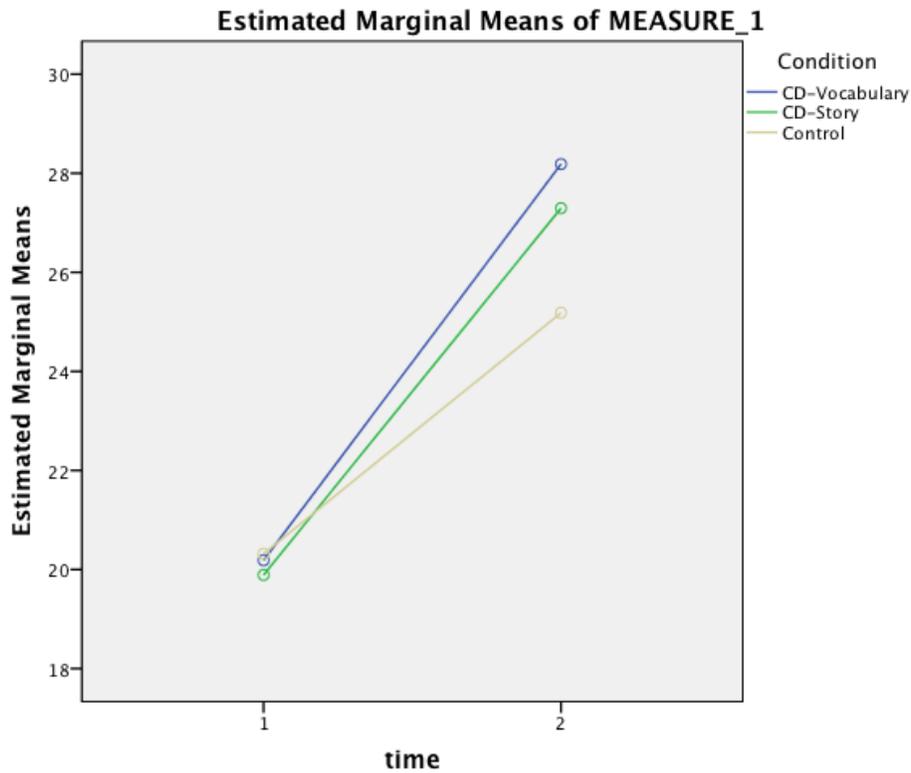


Figure 4. Estimated Marginal Means Pretest-Posttest: Change Over Time by Classroom Condition on the Vocabulary Test Listwise  $N = 76$ .

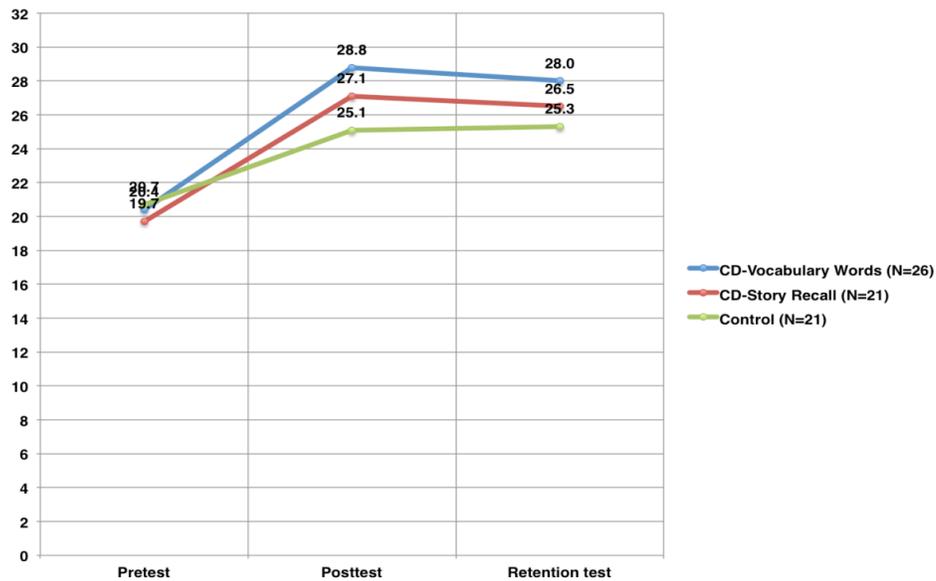


Figure 5. Gain Line Graph for Means of Vocabulary Words Learned by Classroom Condition Pretest, Posttest, and Retention Test Listwise  $N = 68$ .

Figure 5 and Table 13 illustrate the word gains for the pretest-posttest and word retention five weeks from the posttest, which included a two-week December break, and resulting in a listwise analysis of  $N = 68$ . All three groups maintained word retention at approximately the same rate.

Table 13: *Pretest-Posttest and Retention Test Means Gain Scores Comparisons on Vocabulary Words by Treatment Group Listwise  $N = 68$*

Group	<i>n/N</i> by Group	Pretest-Posttest Means Gains by Student	Retention Test Means Gains by Student
Experimental Group I (creative dramatics and vocabulary words)	$n = 26$	7.65	- 0.8 of a word loss
Experimental Group II (creative dramatics and story retelling enactment)	$n = 21$	7.48	- 0.6 of a word loss
Control Group (group without creative dramatics)	$n = 21$	4.48	+ 0.2 of a word gain
Total	$N = 68$	6.54 Average Word Gains	- 0.4 of a word loss average from Pre- test-Posttest Means Gains to Retention Test

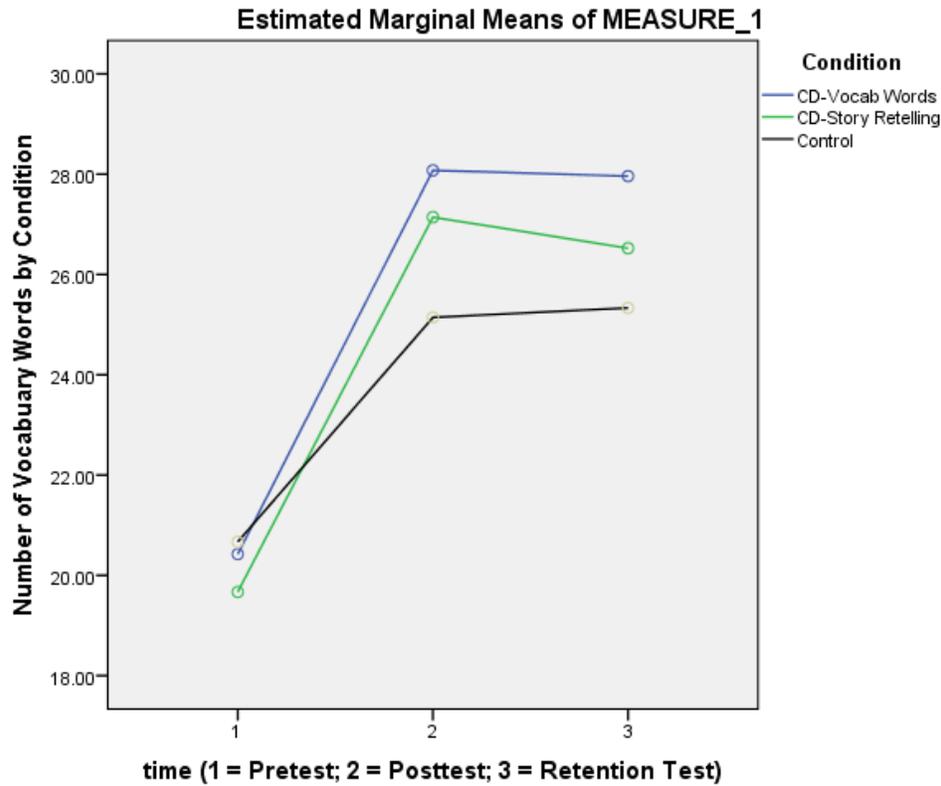


Figure 6. Estimated Marginal Means Pretest, Posttest, and Retention Test: Change Over Time by Classroom Condition on the Vocabulary Test Listwise  $N = 68$ .

Following, in Table 14 are the results Descriptive Statistics for Mixed-Between-Within Subjects ANOVA Comparing Pretest-Posttest and Retention Test Means Listwise  $N = 68$ . These results provide insight into the differences between the groups and treatment interventions in answering research four of this study. Moreover, the ANOVA results, coupled with the results of the non-parametric equivalent procedures—which are further validated by the results of the post-hoc test procedures—show where there is statistical significance between the creative dramatics interventions as compared to the control, and as compared to each other. Descriptive statistics calculated from all three measures of the pretest, posttest, and retention test are displayed in Table 15 for the listwise  $N = 68$ . The range of scores on the pretest was 19 words; the range of scores on the posttest was 12 words; and the range of scores on the retention test was 15 words—providing further validations for the treatment effects.

Table 14: Descriptive Statistics for Mixed-Between-Within Subjects ANOVA Comparing Pretest-Posttest and Retention Test Means Listwise  $N = 68$

Test Administration	Condition	Mean	SD	$N/n$
	Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	20.42	5.17	26

<b>Pretest (0-31)</b>	Experimental Group II (Creative Dramatics and Story Retelling [CDSR])	19.67	3.06	21
	Control Group (CG)	20.67	4.60	21
	Total	20.26	4.40	68
	Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	28.08	3.14	26
<b>Posttest (0-31)</b>	Experimental Group II (Creative Dramatics and Story Retelling [CDSR])	27.14	2.24	21
	Control Group (CG)	25.14	4.03	21

	Total	26.88	3.40	68
	Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	27.96	3.46	26
<b>Retention Test (0-31)</b>	Experimental Group II (Creative Dramatics and Story Retelling [CDSR])	26.52	2.73	21
	Control Group (CG)	25.33	3.92	21
	Total	26.71	3.53	68

Skewness and kurtosis scores, in Table 15, are within the normal range (below 1.0) on the pretest and posttest scores, and slightly above the normal range (above 1.0) on the retention test.

Table 15: *Descriptive Statistics: All Measures by All Groups Listwise N = 68*

Measure	Mean	Median	Mode	SD	Skewness	Kurtosis	Range
Pretest	20.264	19.00	18.00	4.386	.471	-.130	19.00 (11 - 30)
Posttest	26.882	28.00	29.0	3.396	-.755	-.387	12.00 (19 - 31)
Retention	26.705	27.00	27.0	3.532	-1.147	1.144	15.00 (16 - 31)

Table 16 provides the descriptive statistics for  $N = 68$  comparing the three groups over three test administrations.

Table 16: *Descriptive Statistics: Pretest, Posttest, and Retention Test by Treatment Group Comparison Listwise N = 68*

Intervention	N/n	Pretest			Posttest			Retention Test		
		Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
Experimental Group I (Creative Dramatics and Vocabulary Words [CDVW])	26	20.42	19.00	5.17	28.08	29.00	3.14	27.96	28.00	3.46
Experimental Group II (Creative Dramatics and Story Retelling [CDSR])	21	19.67	19.00	3.06	27.14	28.00	2.24	26.52	27.00	2.73
Control Group (CG)	21	20.67	21.00	4.60	25.14	24.00	4.03	25.33	26.00	3.92
Total	68	20.26	19.00	4.40	26.88	28.00	3.40	26.71	27.00	3.53

Additionally, Pallant (2007) suggested a one-way repeated measures ANOVA design be used when each subject is measured on the same continuous scale on three or more occasions, as in this particular investigation. Table 17, following, illustrates the results from a one-way repeated measures ANOVA, which compared the scores on the dependent variable teacher-researcher developed criterion-referenced 31-question vocabulary test used across the three test administrations.

Table 17: *Descriptive Statistics for One-Way Repeated Measures ANOVA Listwise N = 68: Teacher-Researcher Developed Criterion-Referenced 31-Question Vocabulary Test*

Time Period	N	Mean	Standard Deviation
Time 1 (Pretest)	68	20.26	4.40
Time 2 (Posttest)	68	26.88	3.40
Time 3 (Retention Test)	68	26.71	3.53

These significant findings further illuminate the generalizability of the results, and provide the detail of the data and analysis needed for educators to cite the results and this research in their *ESSA: Title I Part A, Sections 1008-1009* plans to include the arts as a part of educating the whole child. Specifically, the repeated measures ANOVA showed a statistically significant effect for *time*, Wilks' Lambda = .25,  $F(2, 66) = 98.10$ ,  $p = .000$ ,  $\eta_p^2 = .75$ . This data indicates a very large effect size for the creative dramatics treatments over *time*. These scores were compared at Time 1 (*the pretest administration prior to the intervention*), Time 2 (*the posttest administration following the 17 days of intervention*), and Time 3 (*five-week follow-up retention test*).

Overall, the word means gains of the three groups remained stable, indicating that the students retained their vocabulary achievement over five-weeks, which included the two-week December holiday vacation. Consequently, 65 of the listwise  $N = 68$  students who were measured on all three test administrations gained vocabulary words throughout the study. Noteworthy, the findings provide statistically significant evidence that the students who practiced the two creative dramatics interventions had greater vocabulary achievement versus the control group.

## Recommendations to Guide New Research

**Limitations and Delimitations.** The study limitations included those intervening or confounding variables out of the control of the researcher, and the delimitations were the limitations imposed by the researcher. They follow:

**Limitations.** Limitations included: equal numbers of males and females at the beginning of the study; student mortality throughout the three test administrations; the loss of 85 minutes of instructional time due to the students passing from their regular classrooms into their randomized study treatment classrooms; and the study school and district calendar schedule of the required basal unit of study occurring with multiple interruptions to sequential delivery of the treatments, as detailed in Figure 1. It can be inferred that these interruptions in the daily consistency of the treatment delivery impacted the student mortality and the results of the treatment that required 17 days of sequential and consistent treatment interventions. Some of these issues were magnified by the absences and attendance of study teachers, and the timing of the treatment during the 45-minute language arts block regarding the fidelity to the specific lesson plans as detailed in the study Appendices M, N, O, P, and Q. Further, the following effects were not measured: creative dramatics achievement; individual student social-emotional

effects; and the qualitative aspects of the study via the artistic processes (creating, performing, presenting, responding, and connecting)—including students dancing, singing, acting, creating, drawing, playing, improvising, and making music to demonstrate, communicate, and share their personal understanding of the four stories. These observed qualitative data, which also included photographs of the students in the three groups on a daily basis, were further validation and support to the quantitative results of the study.

**Delimitations.** The delimitations, or limitations imposed by the researcher included: requiring an entire fourth grade to randomize students and teachers; a focus on the effect of creative dramatics on vocabulary achievement; the use of the district's basal and at the district required timeline for such; conducting the study during the school day; classroom teachers providing the treatment; classroom teachers being trained by the researcher; the researcher daily observing in each classroom; involving the teachers in the development of the dependent variable and initial lesson plan; teacher confidentiality of their treatments with each other and their students; and using a pretest-posttest control group design.

**Recommendations.** A key recommendation by the researcher was to replicate the study with stricter controls, for a longer period of time, and with a larger sample size in order to validate the results. Such controls would include an attempt to control anything that could be controlled in a school environment that could negatively influence the treatment consistency and fidelity for the students and teachers in the experiment. Such control recommendations would be: no interruptions to the 45-minute daily language arts block of instruction for the duration of the study; such as, teacher illness and teacher in-service days that occurred during the daily scheduled treatment times of the language arts block, and required the need for substitute teachers; school and district assemblies; monthly fire drills; student announcements; and holidays and vacation days. Required school district drills, announcements, professional development activities, assemblies, and more, could be scheduled before or after the 45-minute language arts block during the 20 days of the experiment.

A further recommendation regarding the two treatment groups would be to provide the 15-20 minutes of prescribed creative dramatics daily treatments, during the 45-minute language arts block in the normal school day, at the beginning of each language arts block period, to ensure the agreed upon consistency and fidelity of the creative dramatics treatments and routine expectations of the students. Further, the control group teacher would also be required to teach the 10-15 minutes of the required language arts basal lesson involving the *Reader's Theatre* elements of the daily story recommendation, followed by the five minutes of journal reflection, at the beginning of each language arts block period, to ensure the agreed upon consistency and fidelity of the required basal instruction in the district's arts integration unit of study—required of all fourth graders in the study school district's adopted language arts curriculum: *Theme 2: American Stories: Focus on Plays* (Houghton Mifflin Reading, 2005). Should the study treatments be provided at the beginning of the daily 45-minute language arts block, to ensure that 15-20 minutes of the treatment would be experienced by students, there would need to be three researchers available on site for the study.

## Conclusion

This specific study remains the only empirical, replicable, generalizable, and transferable study addressing the gap of vocabulary achievement and creative dramatics reporting statistical significance. It was further testified that the pattern of medium to large effect sizes found between the creative dramatics and vocabulary words (CDVW) intervention in comparison to the control group (CG) were sta-

tistically significant which lends validity to possible practical significance in teacher practice. Additionally, a medium effect size between the creative dramatics and vocabulary (CDVW) and the creative dramatics and story retelling (CDSR) interventions were manifest. Noteworthy, the study recounted higher vocabulary achievement of the two treatment groups versus the control group without creative dramatics; as well as acknowledging practical significance of the two treatment group teachers by multiple means through the parametric and non-parametric procedures used to analyze the results for generalization and possible replication; as well as personal testimonies of the two treatment teachers a year following the study completion.

Therefore, it can be inferred that the statistically significant findings shared in this article provide empirical evidence that sustained, researched, and consistent creative dramatics treatments, taught by classroom teachers and integrated into district required language arts instruction, improved the vocabulary achievement of students at the fourth grade level. Consequently, this data provides empirical evidence that the vocabulary achievement gained and maintained by the students who received the creative dramatics interventions is different from a normal population.

Therefore, the study provides a piece of empirical evidence to promote arts educational strategies for all learners – arts for ‘art’s sake’, integrated arts, and arts in the content areas or arts integration. Policymakers, administrators, and practitioners wishing to apply for funding for innovative ways to provide and integrate arts educational practices—via the artistic processes of creating, performing, presenting, responding, and connecting—may cite this study.

Significantly, this study meets the requirements of *ESSA: Title I Part A, Sections 1008-1009* as a *Tier 1* study representing strong empirical evidence to advocate for access to arts instruction for all learners during the school day—in innovative ways—as defined in the federal education law, and in efforts to provide a well-rounded education, that includes the arts, for every student (Bresler, Russell, & Zembylas, 2007; GovTrack.us, 2019; Jones, 2018/2019, pp. 27-29; USDOE, 2015). Consequently, the utilization of the study and results provide empirical research that can be used to support arts educational methods for all learners in their academic attainment. Finally, the results provide a pathway for the generalizability of the arts treatment strategies and methods employed in this study to other academic subjects and with other grade levels—nationally and internationally—regarding enhanced student achievement through arts educational interventions.

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## Endnotes

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*Dietmar Waterkamp (Germany)*

## An Obituary for Götz Hillig (15 February 1938 - 6 June 2019), the Important Makarenko Researcher

**Dietmar Waterkamp:** 关于 Götz Hillig 的讣告 (1938 年 2 月 15 日至 2019 年 6 月 6 日), 一位重要的马卡连柯研究者 // 關於 Götz Hillig 的訃告 一位重要的馬卡連柯研究者 // *Dietmar Waterkamp: Ein Nachruf für Götz Hillig, einen bedeutenden Makarenkoforscher* // **Дитмар Ватеркамп:** Некролог. Памяти Гетца Хиллига, известного исследователя биографии А. С. Макаренко

\* \* \*

Götz Hillig, faculty member of the Institute of Education at the Philipps-University at Marburg (Germany) was respected as an outstanding researcher on the works and life of the Soviet (Russian and Ukrainian) pedagogue Anton Semyonovich Makarenko (1888-1939), not only in Germany but in the world. He died after a couple of years of serious disease. His perseverance in exploring a single educator throughout the full professional career is singular.

Early in his university education he came across the books of Makarenko yet could not think of an academic career for himself. He expected to be a school teacher and finally passed the state examinations for secondary teachers. Nevertheless he preferred to see himself as an editor of German exile literature. His approach to literature was collecting, documenting, clearing all circumstances and editing. Beneath the scientific endeavour a deeper motive was at work. Being a son of a manufacturer in the town of Chemnitz (in GDR times called „Karl-Marx-Stadt“) in Saxony it was his wish to contribute to establishing new relations to Germany's neighbours in the East, especially to Poland. He put this intention into practice within a students working group at Marburg by regularly travelling across the iron curtain.

In 1963 he came out with an inventory of all publications about Makarenko and all translations of his writings in West German libraries which still today is useful. This publication paid personally when in 1968 Hillig was appointed an assistant lecturer with Prof. Leonhard Froese at the Philipps University. Froese had taken notice of Hillig's publication and offered him this position. Whereas Froese had somewhat rashly declared Makarenko the most impressive personality in the field of education in that century, Hillig was more hesitant in lauding Makarenko, he soon knew that much critical work on sources and texts was to be accomplished before a fair judgement was feasible. Froese meanwhile changed the mood towards Makarenko among German educationists.

In relatively few years Hillig acquired both involved languages Russian and Ukrainian, both written and oral. His companion who also started work with the newly founded Makarenko-unit, Siegfried Weitz, enjoyed the advantage of completing Russian studies within the teacher training at Marburg university. Hillig's commitment with the Makarenko research unit at the University of Marburg resulted in a lifelong search für documents connected with Makarenko's activities in the field of youth education in archives and libraries in socialist countries. In the midst of the so called Cold War between East and West Hillig was a traveller into those countries although as a child he fled from the German Democratic Republic (GDR; East Germany) together with his parents and siblings where the family had to leave behind their fortune. As his father who even was imprisoned in the

GDR as a co-called class enemy was not allowed to return Hillig recognised his obligation to know more about these countries and to be in touch with private people there. Perhaps his private archive will reveal the difficulties of these travels. The multitude of these travels which were untypical in those days for individual persons without official backstop and the multitude of friendships which came out of them in this period of mistrust are worth to be recognised.

The findings in the archives soon made the Marburgers plan to accomplish at Marburg a bilingual edition of all writings of Makarenko. The interventions into the original Makarenko-texts which the Soviet editors had conducted were too many, in terms of omissions, distortions and insertions. They ought to be reversed at the base of original texts. For Hillig this ambition set the melody for his full professional life. At least four decades he spent to this goal and additionally he cleared many events in Makarenko's life.

Hillig's knowledge on Makarenko was asked for in Germany-West and Germany-East as well. Some Makarenko adherents in the GDR were in contact to Hillig. His knowledge on the contemporarian Soviet Union grew together with his travels, he collected a private library especially on the Soviet Union, also on other East European socialist states, yet he did not slacken his focussing on the topic of Makarenko. It was not Hillig's fault that the Marburg edition was abandoned in the midst of its way, rather the publisher in Ravensburg in Southern Germany dropped the project for financial reasons. Not more than 8 of the planned 20 volumes were released. Many more individual texts of Makarenko were translated and documented by Hillig in his textcritical manner in journals. They all should be parts of the Marburg edition, yet today are not easy to find on diverse places. Seen from today the question suggests itself if not a group of professors of Comparative Education could have raised that money and helped to continue the edition. Yet, the co-operation across university institutes in common projects was seldom practised then.

About Hillig struck the selflessness and modesty of his way of research. The focus was on the topic, never on him as person. He could cite dozens of episodes and statements of Makarenko's life and of people who knew him and nearly always there was a sense of humor in his tellings. The ability to take pleasure in his research topic despite its political gravity probably was part of the easiness which he inherited in the upper middle-class family, he was born into at Chemnitz. This obviously survived even the stubborn mentality of the rulers in the GDR. To his immense factual knowledge about Makarenko those debators who were enthusiastic towards theories or even ideologies had to yield. It is a pity that Hillig did not receive a professorial chair. He was an academic full of surprising narratives. Yet to be so devoted to one's topic sometimes means to miss the own career. Hillig was not a venerator of Makarenko, he did not ignore the dubious traits of this historical figure of pedagogy, he worked at the picture of Makarenko on the basis of critically examined sources and facts.

(See more about this topic in: [www.ide-journal.org/wp-content/uploads/2018/11/IDE-2018-2-full.pdf](http://www.ide-journal.org/wp-content/uploads/2018/11/IDE-2018-2-full.pdf), pp. 37-55.)

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