

EQUALIZING LEARNING ENVIRONMENTS THROUGH A MODEL OF PROFESSIONAL DEVELOPMENT CONVERGING CRITICAL SELF-REFLECTION, CULTURAL PROFICIENCY, AND SELF-DETERMINATION THEORY

ANGELA FORD

George Washington University

ABSTRACT

This article explores a theoretical model of professional development that combines the goals of further equipping teachers through professional development while at the same time equalizing learning environments for the students. Any steps toward equalizing learning environments helps to close the opportunity gap and decrease the achievement gap for those students that are experiencing high levels of success. The model involves purposeful convergence of critical self-reflection, cultural proficiency training, and knowledge of self-determination theory. A brief explanation is provided for each of the model elements as well as a picture of what the convergence might look like and a plan for implementation and future research.

INTRODUCTION

Educators are expected to understand how to create atmospheres conducive to social and emotional learning based on the understanding that academic learning is not the only type that helps students become successful in life. Being equipped to address all the needs of all students at all times is a lofty yet noble educational goal worthy of attempting to achieve. To attain success in this arena requires educators grow through experience and are provided appropriate and on-going professional development that aids in that growth.

Research is ongoing to investigate effective methods to improve or expand educator professional development and to eradicate classroom disparities. Much research has produced useful strategies and ideas; however, much remains to be done. The purpose of this article is to propose a model that could help get closer to the goal of adding to educator training while also working toward the goal of eradicating learning environment disparities. This article will give a brief review of why it is imperative to equalize many aspects of learning environments and then will go on to give a brief overview of each component of the proposed model and then explain how professional development based on the combination of understanding and practicing *critical self-reflection*, a knowledge of and willingness to grow in *cultural proficiency*, and a grasp of the tenets of *self-determination theory* (SDT) can help educators create healthier learning environments for all of their students including those that may be less comfortable in traditional schools, such as those that are minorities in comparison to their peers, that fall lower on the socio-economic scale, or who have diverse learning abilities. Evidence is plentiful that each of the elements that make up this model can improve educational settings; however, I am proposing that the convergence of all three may be more effective than each one being practiced alone.

EQUALIZING LEARNING ENVIRONMENTS

The quality of learning environments can be improved and therefore equalized through examining and improving different aspects of the environment such as the physical

built environments and classroom layouts (Earthman & Lemasters, 2011; Ford, 2016; Uline & Tschannen-Moran, 2008), resource availability and technology use (Dey, 2017; McKnight et al., 2016), the quality of teachers (Goldhaber, Lavery, & Theobald, 2015) and the cultures and climates within schools (Uline & Tschannen-Moran, 2008). The professional development being proposed in this article would focus on the method of improving educator training and the choices they make affecting the cultures and climates being created within classrooms.

Horace Mann labeled education ‘the great equalizer,’ and whereas it could be, education is often not equalizing because it is not being offered equitably, and at times is even increasing the opportunity gap experienced by students. Carter and Welner (2013) point out that it is the differences in educational opportunities that contribute to the differences in student outcomes. The differences in quality of learning environments are essential parts of the differences in opportunities (Carter & Welner, 2013). Achievement gaps can be identified along racial and ethnic lines as well as along socio-economic lines. Wherever that one group of students is performing below another group of students, achievement gaps exist, and can often be traced back to opportunity gaps. These gaps can be shown clearly through comparing schools on issues of overcrowding, building conditions (HVAC, lighting, air quality), available technology, aesthetics, etc. Whereas those elements, and others, need to be addressed, those are not the environmental inequities focused on for this article. The inequities to be addressed here are subtler and can often be seen in different classrooms within the same building. When observers walk down halls in a school, whether the school is elementary, middle, or high, they can often identify classrooms where learning is taking place, students have general positive well-being, and at least a functional quality motivation. At the same time, they can identify those where this is not the case. These differences are based more on the feel of the environments and the relationships established between teachers and students.

The very classrooms students are attending are either led by teachers who are mindful of the effects their choices make or they are not. They are led by teachers who recognize and appreciate cultural differences or they are not. They are led by teachers who care about the well-being and motivational quality experienced by their students or they are not. Just as with any professional development, this model of converging concepts will not help improve teachers who are not willing to improve, however for those that are, this could provide a new set of tools for them to experience success. The demands on teachers are high and in many ways increasing. Therefore, they need to be equipped to meet those demands and equalize their learning environments or maintain a high quality environment once it has been attained. High quality learning environments should be available to all students and this proposed PD model is one way to insure teachers are equipped with the knowledge and skills to create such environments to the best of their abilities and in spite of the other restrictions they encounter in their schools and classrooms.

CRITICAL SELF-REFLECTION

One of the elements that construct the model being proposed for this article is critical self-reflection. A variety of definitions of critical self-reflection exist and for the purposes of this paper the one that will be used is provided by Liu.

Critical reflection is a process of constantly analyzing, questioning, and critiquing established assumptions of oneself, schools, and the society about teaching and learning, and the social and political implications of schooling, and implementing changes to previous actions that have been supported

by those established assumptions for the purpose of supporting student learning and a better schooling and more just society for all children. (2015, p. 144).

Strong educator training programs include instruction and practice on critical self-reflection, since this practice is not always intuitive. Reflection benefits all aspects of teaching and works well with most, if not all educational, motivational, and developmental theories as well as other concepts of effective environment establishment and evidence-based pedagogies. However, to be comprehensive and effective in improving education, training in critical self-reflection should contain both considerations of content and process (Liu, 2015). Without self-reflection on content understanding and application, many lessons teachers receive through their preparation programs and their professional development are not applied or if they are, they are not applied in long-term or in a manner allowing for genuine growth for the educators. Without considering process, reflection may not go deep enough to be useful (Korthagen & Vasalos, 2009). Thorough reflection helps with knowledge, skills, and dispositions (Shandomo, 2010).

Shandomo (2010) discussed how the ideas of being a reflective teacher go back to Dewey, “who maintained that reflection is an important aspect of learning from experience. Reflective thinking leads educators to act deliberately and intentionally rather than randomly and reactively.” (p. 103). If PD can be designed to help educators be more intentional in their actions, choices, and pedagogies, improvement will be experienced immediately after the PD, and hopefully maintained through the forward momentum of continual growth. Shandomo (2010) concludes that “the primary benefit of reflective practice for teacher candidates is a deep understanding of their teaching styles and an ability to define how they will grow toward greater effectiveness as teachers” (p. 112).

Self-reflection can help teachers to recover and retain positive well-being for themselves and in addition create an atmosphere of well-being for their students. Meeting the psychological needs of all the students while teaching can be overwhelming. “Teaching closely resembles clinical psychology, but it takes place in an environment more like that of factory production” (Glickman, Gordan, & Ross-Gordan, 2018, p. 27). Teachers often cope with the overwhelming stressors, by either leaving the profession or by closing off from alternative teaching methods and keeping a rigid structure in their classroom (Glickman et al., 2018). Frustrated teachers that leave the profession no longer have the ability to positively affect their students. Frustrated or overwhelmed teachers that stay and limit their openness to their students are not creating environments conducive to student well-being. It is the teachers that stay and find and use the tools to stay emotionally and psychologically well that go on to help their students experience an environment that promotes wellness. Critical reflection facilitates well-being and introspective learning about values, beliefs, knowledge, and experiences that contribute to perspectives of one’s self, other people, and the world (Shandomo, 2010).

Writing can be an effective practice for teachers to use for self-reflection giving them a method “to remember, recall, reconstruct, re-create, and represent what they learn” (Shandomo, 2010, p. 102). A model of reflection such as the ALACT model can also be an effective method (Korthagen & Vasalos, 2009). The steps of the ALACT model of reflection include action, looking back, awareness, creating alternatives, and trial. When used with the onion model (a model giving reflectors a variety of layers to reflect on) ALACT has shown to be an effective way of reflecting with more depth and success (Korthagen & Vasalos, 2009). Reflection should not be a means to a quick fix but should rather be a cyclical ongoing process

of development (Korthagen & Vasalos, 2009). True and deep self-reflection takes into account the actions as well as the state of mind and emotional well-being of the person doing the reflecting (Korthagen & Vasalos, 2009). Educator training containing specific assignments and projects that prioritize critical reflection may assist in solidifying the desired practices for each educator (Shandomo, 2010).

CULTURAL PROFICIENCY

The second element of this proposed model and a concept that requires critical self-reflection is cultural proficiency. Lindsey et al., (2018) list the tools of cultural proficiency as 1) the barriers, 2) the guiding principles, 3) the continuum, and 4) the essential elements. The *barriers* to cultural proficiency include yet are not limited to privilege and entitlement, systems of oppression, and unawareness and resistance. The *guiding principles* are needed to combat the barriers and, whereas the list is long, these principles can be seen as the “core values, the foundations” (Lindsey et al., 2018, p. 7) of cultural proficiency. The cultural proficiency *continuum* is a great graphic for helping individuals visualize where they would find themselves on a horizontal scale that has on the far left, cultural destructiveness, and on the far-right, culturally proficiency (See Figure 1.) Between destructiveness and proficiency, from left to right are cultural incapacity, cultural blindness, pre-competence, and competence. The three stages on the left are based on the barriers to cultural proficiency and those that fall on the right side of the *continuum* make up those based on the *guiding principles*. The *essential elements* are what a culturally proficient person would be capable of and willing to do, such as, assessing, valuing, and managing differences.

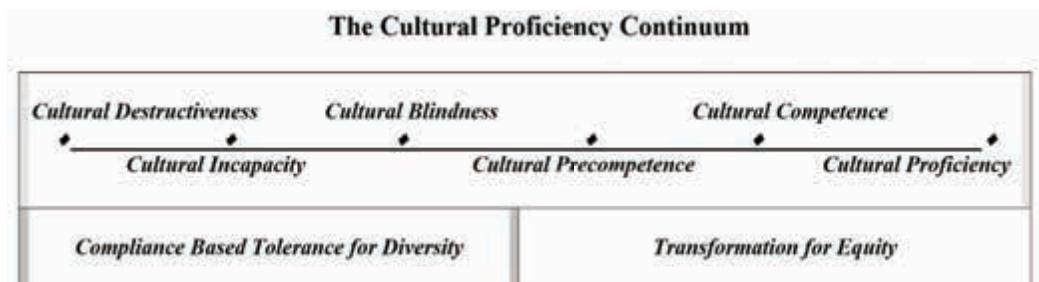


Figure 1. *The cultural proficiency continuum graphic (Lindsey et al., 2018). Used with permission.*

Educators, like all individuals, fall somewhere on this continuum. Educators that are trying to be culturally proficient are likely on the right side of the continuum and are attempting to establish learning environments that are friendly and conducive to all of their students. Educators that are uninterested in recognizing and valuing the cultural differences of their students are closer to the left of the continuum and are unable to create a high-quality learning environment for all of their students. Educators that fall on left side of the continuum may be exhibiting blatant behaviors against students in their classes. Educators near the middle may be unknowingly talking and acting in ways that are detrimental to their students. Awareness will either push them to the right if they acknowledge they need growth and they genuinely want to reach all of their students, or awareness can help to identify an unwillingness of the individual to adapt and thus categorize a movement to the left.

School leaders will do well to educate themselves and be ready and willing to meet with their teachers wherever they are on the continuum, and either guide them to the right side or encourage them to find another field of work. Ultimately cultural proficiency helps teachers to stop seeing differences as problems and to start embracing and learning from each unique culture represented within their classrooms, moving from deficit-based thinking to value based (Khalifa, 2018; Lindsey et al., 2018).

Even in schools that are predominantly one culture there will be benefits from learning and changing the mindset about other cultures. Even if there are only a couple students from other cultures they should not be expected to abandon their entire culture for the culture that is in control. This should be the case for students and also for faculty and staff. Students from the majority and the minority cultures benefit from more awareness. The school culture improves, and the environment becomes more representative of the global culture students will experience once they leave the K12 environment (Lindsey et al., 2018).

To be truly able to create equitable learning environments for all students a willingness to be culturally proficient is critical. One point about cultural proficiency is that to be truly proficient; individuals need to continue to grow. Once you arrive at proficiency the target may move, making critical self-reflection an imperative aspect of remaining on the right side of the *continuum*. Individuals also must be aware that in some areas of diversity they may be more proficient than in others, which again requires constant reflection and growth.

SELF-DETERMINATION THEORY

So far this article has covered the importance of critical self-reflection and the importance of cultural proficiency training for educators. Next the discussion moves to self-determination theory (SDT) as it applies to equalizing learning environments and promoting high quality motivation in students. SDT is a macro theory of motivation, development and well-being that explores types of motivation rather than just measuring quality (Ryan & Deci, 2017). The types of motivation either fall into the category of intrinsic or internal motivation or extrinsic or external motivation. Intrinsic motivation comes from within a person based on personal interest and enjoyment and extrinsic motivation comes from outside of a person based on consequences, such as rewards or approval. Intrinsic motivation is naturally autonomous and volitional, and extrinsic motivation is only as autonomous as the behavior it motivates is integrated by the individual (See table 1). The more autonomous forms of motivation are the healthiest forms. Intrinsic motivation, by its very nature of being highly autonomous is often a healthy form of motivation. Extrinsic motivation on the other hand varies greatly in levels of autonomy or volition and therefore varies in levels of health (See Table 1).

As can be seen in Table 1, extrinsic motivation can be introjected or internalized and can still be self-determined and volitional. A more detailed explanation is beyond the scope of this article however would be helpful to grasp more fully before planning and designing professional development using SDT. Another important tenet of SDT is that people have three basic psychological needs that when satisfied lead to the healthier forms of motivation. These needs include autonomy, competence and relatedness (See Table 2).

Table 1: *Types of Motivation as defined by Ryan and Deci, (2017)*

	Motivation Orientation	Autonomy/Control Continuum
Intrinsic	Personal interest, enjoyment	Highly autonomous, volitional
Extrinsic	External consequence, reward, approval	Can be autonomous or controlled
Levels of extrinsic internalization		
Externally regulated	Controlled by outward forces	Controlled
Introjection	Controlled by negative inward forces	Negative internal control
Integrated	Volitional internal forces	Volitional/Autonomous

Table 2: *Basic Psychological Needs as defined by Ryan and Deci, (2017)*

Need	Definition
Autonomy	Self-endorsement, ownership, and self-regulation
Competence	Development of skills, understanding, and mastery
Relatedness	Connection and involvement with others

Since SDT is concerned with social conditions that either enhance or diminish individual’s perceptions of the meeting of their basic psychological needs, it a great theory to use when examining learning environments that affect student motivation, social emotional and academic development, and well-being. SDT has been applied and tested in a plethora of contexts including in learning environments to examine what types of environments meet these needs and what types of environments thwart these needs (Ryan & Deci, 2017).

Across such experimental studies, it was found that when external factors were used in controlling ways, they tended to undermine intrinsic motivation. Yet when contexts supporting autonomy, competence, and relatedness (e.g., by providing choice, positive feedback, and empathy), intrinsic motivation was enhanced (Ryan & Deci, 2017, p. 354-355).

In other words, studies show that students are more apt to thrive in environments that meet the basic psychological needs as defined by SDT. Studies also provide evidence that environments that thwart these needs have negative effects including evidence of biological stressors (Reeve & Tseng, 2011). When needs are met, and a higher quality motivation is attained, students are more curious, more creative, more productive, more compassionate, experience more integration, tend to be more fully functioning and flourishing, and experience other positive improvements (Ryan & Deci, 2017). When needs are not met, students tend to be more self-focused, defensive, unmotivated, aggressive, antisocial, fragmented, and exhibit depleted motivation (Ryan & Deci, 2017).

“SDT posits that the need supports found in schools and classrooms affect childhood, adolescent and emerging adult development, achievement outcomes, and well-being” (Ryan & Deci, 2017, p. 352). Children are required to go to school and the environments they are in are either supportive of high quality motivation or they are thwarting and harmful. “Certain classroom climates ignite this powerful fuel for learning, whereas others smother it.” (Ryan & Deci, 2017, p. 354). Reeve and Jang (2006) created a helpful list of teacher behaviors that either support or thwart autonomous or healthier types of motivation. They defined behaviors that are perceived as supportive to include teachers making time for students’ independent

work, giving students time to talk and then purposefully listening to what they have to say, encouraging student effort, and acknowledging student experiences and perspectives. Teaching behaviors identified as more controlling and needs thwarting included not giving the students enough time to work independently, stating answers too quickly when students just needed more time to work through the problems/work, being demanding and directive, and using controlling language.

When SDT is being taught to teachers, a couple of important ideas to point out are that curriculum design is not often naturally supportive of meeting the basic needs and the demands for high-stakes testing is often perceived as controlling and need thwarting. Also, a focus on performance as opposed to mastery goals creates a non-nurturing environment. Teachers who are aware of the detrimental effects of these demands may be better able to compensate in their individual classrooms and still create an environment that is more conducive to high quality motivation and ultimately to student success. SDT has benefits to improving classroom environments as a stand-alone theory and combining it with critical self-reflection and the tools of cultural proficiency will only improve the effects it can have on equalizing learning environments.

CONVERGENCE OF THEORIES

In order to equalize learning environments, educators need to be able to look deeply at not only their behaviors, but also what internal and external factors are causing those behaviors. Once educators become more self-aware of their values and beliefs, they may choose to adapt even deeply held convictions in order to behave in a manner that is more conducive to producing a classroom culture where all students, even those normally underserved, feel their basic psychological needs are being met through appropriate autonomy support, competence support, and healthy relationships. Teachers will be equipped to show genuine care and interest in all of their students' outcomes and futures.

When classroom environments are clouded with beliefs and behaviors that thwart the needs of any students the needs of all students are affected. Yet when teachers embrace this integrated model of PD using SDT to illicit healthy forms of motivation in students, using the knowledge of cultural proficiency training to embrace and value all students, and critically self-reflecting to adjust and improve, educators can create healthier environments for all of their students and ultimately help all of their students reach higher levels of success.

Below is a simple Venn diagram that shows how all of the concepts overlap. How at times only two are overlapping, however, how all three converge in the center (See Figure 2).

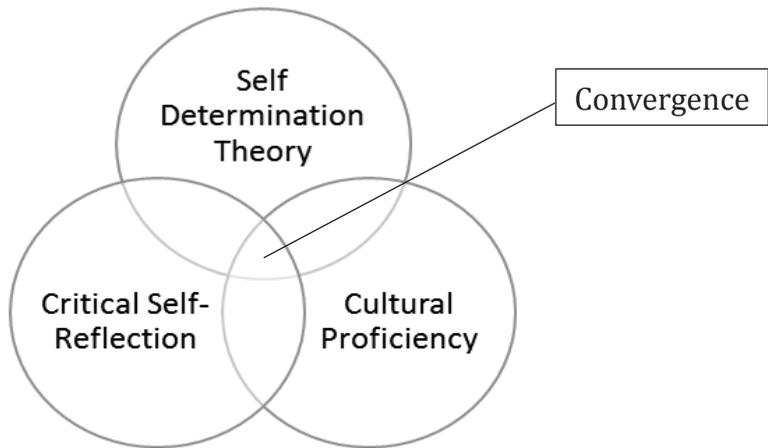


Figure 2. *The convergence of critical self-reflection, cultural proficiency, and self-determination theory.*

As shown in the sections on each element, each can be beneficial when applied alone. However, when they are used together, learning environments can be transformed. When critical self-reflection is used with cultural proficiency the atmosphere of the learning environment will be renovated into one where each student feels valued and welcomed. However, without a focus on the basic psychological needs, not all students may experience high qualities of motivation. When the teacher recognizes through reflection that one or more students may not feel this way, the teacher will adjust to improve the environment. When cultural proficiency is merged with self-determination theory, the atmosphere may feel accepting and motivating at the start, however, may become stagnant or worse yet, not change when the cultural make-up of the students' changes and the teacher has not recognized these changes through reflection. When two of the concepts are merged an improvement can be seen, however, a ***convergence of all would create a dynamic and constantly improving atmosphere that is motivating and conducive to all learners*** (See Table 3).

With the perspective or angle provided by this convergence model, teachers would possess another set of tools that when used with other best practices, could greatly impact their ability to create optimal environments for all their students to excel. "Critical reflection blends learning through experiences with theoretical and technical learning to form new knowledge constructions and new behaviors or insights." (Shandomo, 2010, p. 101). As this model is approached, teachers will solidify the knowledge gained and as they self-reflect they will learn to make the most use of their own strengths, while also learning to compensate in areas where they experience weakness.

Table 3: *Combining the Concepts and Theories*

	Critical Self-Reflection	Cultural Proficiency	Self-Determination Theory
Critical Self-Reflection		Atmosphere of acceptance but may lack motivation	Motivating atmosphere conducive to some but not all
Cultural Proficiency	Atmosphere of acceptance but may lack motivation		A motivating atmosphere that may not change as the needs change
Self-Determination Theory	Motivating atmosphere conducive to some but not all	A motivating atmosphere that may not change as the needs change	

Critical self-reflection on cultural issues is extremely important to individuals who are not from underserved populations since they do not have the expanded view of their peers and/or students who are minorities. If they are unable to see from others’ perspectives through lack of experiences, then reflecting on what it may be like would be a start to establish empathy and valuing what these peers and students can contribute (Khalifa, 2018). Combining cultural responsiveness and SDT during critical self-reflection would encourage teachers to examine how their students, who come from different cultural backgrounds, view their autonomy support, competence support, and feelings of relatedness.

In addition to being able to see from a variety of perspectives, self-aware teachers know their strengths and weaknesses, their teaching choices and style, their world view that shapes their values, their level of cultural proficiency or cultural receptiveness and competence, and the motivational style they tend to employ and are more effective at reaching a wider range of students. By being aware and by adapting as their school culture and students require, they are much more able to create an equalized learning environment for all of their students.

According to the first proposition of the National Board for Professional Teaching Standards (n.d), teachers should be committed to student learning. Other propositions mention monitoring student learning and learning from experience. Being self-reflective as an educator is a critical aspect of being committed, being able to monitor, and being able to learn from experience. Being committed to student learning also requires being able to relate to and guide all students, which requires cultural awareness and a basic understanding of motivational theory. The type of professional development being proposed here would be in support of these standards.

PLANNING EDUCATOR TRAINING WITH THIS KNOWLEDGE

Teachers have requirements for ongoing professional development to maintain their licenses or certifications. Planning PD that meets this requirement while also equipping teachers to equalize their classroom environments could be highly effective in improving education outcomes. According to Korthagan, (2017), professional development has different levels 1.0, 2.0, and 3.0. With professional development 1.0, the approach is theory to practice. The progression from there with professional development 2.0 is workplace learning with an increased focus on practice. Moving on from there is professional development 3.0 which combines the professional and personal pieces of teaching (Korthagan, 2017).

The type of professional development being proposed would fall into the Level 3.0 category as there would be a focus on the profession while also focusing on the personal

aspects of teaching through deep and thorough critical self-reflection. This model is in line with Korthagen's (2007) claim that the person of the teacher needs to be part of the foundation of educator learning no less than theory and practice. By emphasizing critical self-reflection, the person of the teacher, is directly and consistently involved in the model. In order for school leaders or others that design and deliver professional development to make effective use of this model or any other model, they would need a thorough understanding of each concept and how each can be effectively used on its own and together to produce a high quality training.

Korthagen discussed the importance of using reflection as a tool to improve professional development. What is being proposed here, to converge self-reflection with cultural proficiency and SDT would encourage educators to reflect on their current cultural competency journeys, and whether they are meeting the basic psychological needs of their students. True critical self-reflection in this model would entail deep reflection on how teachers interact with students from their own culture and from outside of their own culture and would also challenge these teachers to reflect on whether they are meeting or thwarting the basic psychological needs of all their students. Korthagen also pointed out that reflection helps bring to the surface much of the learning and experiences that have influenced the educators and that may otherwise remain below the surface of consciousness. In other words, reflecting will cause the teachers to begin to think about classroom happenings and their own behaviors and reactions that may have otherwise gone unnoticed and not contributing to their personal growth as well as their growth as constantly improving teachers.

As far as the logistics of planning for this model of PD, a workshop could be created that would introduce educators to all of these topics during one long session or ongoing workshops could be established that would introduce them to one subject or module at a time. The latter plan would allow for more in depth study into each topic, however, would be most beneficial if the curriculum builds from one subject to the next, clearly tying them together in a cohesive manner and providing practical steps to incorporate when the educators return to their classrooms. Considerations would need to be made to adjust the length and depth on each topic as educators may vary in the knowledge and understanding they possess prior to the start of the PD.

LIMITATIONS AND PLANS FOR FUTURE RESEARCH

This proposed model is theoretical in nature. Empirical research could be done to determine the validity of this model by providing training that incorporates the three elements as discussed and then evaluating the outcomes. This could be done with groups where one receives the treatment and one does not, or it could be done as pre-post design. Studies could be either qualitative or quantitative in nature. Qualitative studies could seek out themes from students whose educators have implemented the model. Quantitative studies could use a number of available scales created through SDT research to assess students' type of motivation and levels of well-being in treatment and no treatment groups or before and after educators implement the model.

Very often, educator training and professional development already converge one or more concepts or theories, however the intentional nature of creating models of convergence may be determined to be beneficial and other models that combine two or more concepts could be created, implemented, and assessed for effectiveness. In this article the motivational and well-being element is SDT, however other motivational theories, well-being theories, or even developmental theories could be applied in a manner similar to what is being suggested. SDT is a great theory to use here because it specifically considers the effects of environments

on the quality of motivation, however, other concepts or theories may also be effectively combined in other models.

CONCLUSION

With a solid understanding and practice of critical self-reflection, a move toward cultural proficiency, as well as a solid grasp of creating a healthy and motivating classroom environment, teachers can create an atmosphere that equalizes the opportunities their students experience and ultimately shrinks the achievement gap in their classrooms. The creation of a model of convergence of these ideas is not expected to be a panacea as there are many other factors that affect learning environments and ultimately student success, nor is this to say other ideas and models would not also be effective. The hope is to demonstrate that, by converging the ideas of critical self-reflection with other ideas and tools, teachers are more prepared to self-improve for the better of all of their students. It is not a naïve notion to think that making differences in individual classrooms is the way to make national and even international change.

REFERENCES

- Carter, P. L., & Welner, K. G. (Eds.). (2013). Closing the opportunity gap: What America must do to give every child an even chance. Oxford, UK: Oxford University Press.
- Dey, E. S. (2017). *An Examination of Educational Resources on Student Performance*. Doctoral dissertation, New England College, Henniker, New Hampshire.
- Earthman G., & Lemasters, L. (2011). The influence of school building conditions on students and teachers: A theory-based research program (1993-2011). *The ACEF Journal*, 1(1), 15-36.
- Ford, A. Y. (2016). Planning classroom design and layout to increase pedagogical options. *Educational Planning*, 23(1), 25-34.
- Goldhaber, D., Lavery, L., & Theobald, R. (2015). Uneven playing field? Assessing the teacher quality gap between advantaged and disadvantaged students. *Educational Researcher*, 44(5), 293-307.
- Khalifa, M. A. (2018). *Culturally responsive school leadership*. Cambridge, MA: Harvard Education Press.
- Korthagen, F. (2017). Inconvenient truths about teacher learning: towards professional development 3.0. *Teachers and Teaching*, 23(4), 387-405.
- Korthagen, F. A., Kessels, J., Koster, B., Lagerwerf, B., & Wubbels, T. (2001). *Linking practice and theory: The pedagogy of realistic teacher education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Korthagen, F., & Vasalos, A. (2009, August). *From reflection to presence and mindfulness: 30 years of developments concerning the concept of reflection in teacher education*. Paper presentation at European Association for Research on Learning and Instruction (EARLI) conference, Amsterdam, The Netherlands.
- Lindsey, R. B., Nuri-Robins, K., Terrell, R. D., & Lindsey, D. B. (2018). *Cultural proficiency: A manual for school leaders*. Thousand Oaks, CA: Corwin Press.
- Liu, K. (2015). Critical reflection as a framework for transformative learning in teacher education. *Educational Review*, 67(2), 135-157.
- McKnight, K., O'Malley, K., Ruzic, R., Horsley, M. K., Franey, J. J., & Bassett, K. (2016). Teaching in a digital age: How educators use technology to improve student learning. *Journal of research on technology in education*, 48(3), 194-211.

- National Board for Professional Teaching Standards (n.d). Retrieved March 30, 2019 from <https://www.nbpts.org/standards-five-core-propositions/>
- Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology, 98*(1), 209.
- Reeve, J., & Tseng, C. M. (2011). Cortisol reactivity to a teacher's motivating style: The biology of being controlled versus supporting autonomy. *Motivation and Emotion, 35*(1), 63-74.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York: Guilford Publications.
- Shandomo, H. M. (2010). The role of critical reflection in teacher education. *School-University Partnerships, 4*(1), 101-113.
- Uline, C., & Tschannen-Moran, M. (2008). The walls speak: The interplay of quality facilities, school climate, and student achievement. *Journal of educational administration, 46*(1), 55-73.