Memo #9

Wellbeing, Connectedness, Awareness, Agency, and Mastery

Teach For All commissioned this independent research paper led by Madhu Narayanan, Assistant Professor of Educational Leadership & Policy at Portland State University, to explore the evidence behind our proposed outcomes, to offer areas for critique, and to identify areas for further inquiry!

Introduction

For anyone who has ever wondered why a student displayed only a minimal level of effort, or why they were not engaged in class, consider this passage:

No amount of educational research, no development of techniques or materials, no special programs or compensatory services, no restructuring or retraining of teachers will make any fundamental difference until we concede that for many students, the only sane alternative to not-learning is the acknowledgment and direct confrontation of oppression – social, sexual, and economic – both in school and in society. (Kohl, 1994, 166)

This passage comes from Herbert Kohl's famous essay "I won't learn from you," and he describes something called "not-learning," that states where students actively choose to disengage from education. One step in accepting his call for a "direct confrontation of oppression" is to explore how our classrooms might be spaces that first and foremost value students as people.

Accepting this call would mean that our priorities in school would have to shift. In much of the writing about the schools, it's accepted that schools exist as places of learning. Students go to school to learn basic skills and learn how to be citizens. But another way of thinking about schools is as places of community and culture, places where students learn about how to be with other people but also learn that they themselves are valuable and important members. Schools can be places where we gain our sense of who we are, our very identities.

Not every student leaves school empowered; many feel powerless to make a difference and without a sense that they can create a life on their own terms. The stark ethnic, racial, economic, and gender differences in terms of raw learning outcomes hint at how school systems historically marginalized certain groups. How can our classrooms be changed to become places where every student learns they matter? How can a student learn that their voice is worth hearing? What can teachers do to empower students to become agents of their own lives?

In this memo, we will discuss some perspectives on these questions through the themes of connectedness, agency, mastery, awareness, and wellbeing. These themes cover a range of topics that are essential to building the conditions where students feel valued and important. As we'll see, they can also influence student motivation and their more traditional learning outcomes. A central theory will be a self-determination theory (Ryan & Deci, 2017), with a particular focus on the topic of connectedness (or belongingness), which will unify many of the themes in this memo. Together, we will present a picture of schools and classrooms as places where students can learn who they are and how they can make a difference.

TOPIC	DESCRIPTION
The fundamental importance of connectedness	Explore the link between learning, risk, and the courage to face failure, examining conditions shaping willingness to acquire new skills. Emphasize the pivotal role of connectedness, interchangeably termed "relatedness," recognized as a need almost as vital as food, influencing human motivation and driving the formation of relationships.
Self Determination Theory: Agency, Connectedness, and Mastery • Agency • Mastery	Unveil the core elements of agency, connectedness, and mastery in Deci & Ryan's Self-Determination Theory, exploring their roles in student empowerment and wellbeing. Delve into agency and its impact on navigating controlled environments, offering choices, and fostering self-efficacy. Examine mastery, emphasizing its influence on engagement, the importance of challenge, and the role of constructive feedback in continuous learning.
Conclusion: Building Awareness through Learning	In this final segment, explore the pivotal elements of self-determination theory. Unveil how addressing these fundamental needs contributes to student engagement, identity formation, and societal awareness. Emphasize the transformative role of educators in empowering students for healthier, more fulfilling lives and advocate for a paradigm shift in viewing schools as places where students not only learn but also discover and shape their identities.

The fundamental importance of connectedness

We often attribute different levels of learning to aptitude, ability, and performance. But it would be helpful to step back and see that all learning involves a degree of risk and an ability to deal with failure. To learn a new math technique, to put your thoughts in writing, to craft an argument, to master a new skill, these all inevitably involve a measure of courage to venture forth with learning, and an ability to withstand failure. What are the conditions under which someone would be willing to do those things?

There are several possible answers, including a person's confidence, their trust in others, and their background skills. From the perspective of human motivation, perhaps one of the most fundamental conditions for action is a sense of connectedness. It is alternately called "relatedness" or "belonging," and I will be using those terms interchangeably in this memo. This is perhaps not the most intuitive place to start thinking about why people undertake actions, but it has become recognized as a need "almost as compelling a need as food" (Baumeister & Leary, 1995, 497). To feel a part of something, to feel valued and seen, to have your peers recognize you, these feelings are important drivers of human action. When Abraham Maslow drafted his famous "hierarchy of needs," he placed belonging above only food and shelter as important sources of human motivation. It seems to be an innate need to seek out and form relationships, one that is nearly universal to all humans. This need perhaps has evolutionary origins as the formation of social bonds has survival and reproductive benefits (Bauemeister & Leary, 1995, 499).

- Connectedness is a perception: To feel "connected" is a personal sense. A teacher cannot tell
 someone that they are important; at least, that's not enough. Similarly, even without saying that
 "you belong," students can infer that they are part of something (Walton, 2021).
- It is more than relationships: Belonging is also more than having relationships or friends. A person might have multiple friends and still feel disconnected; conversely, someone may have few close friendships in a classroom and feel as if they are part of something.

- It is social: The question "Do I belong here?" has two parts: "I" and "here." This suggests that a sense of belonging emerges out of a complex interaction between an individual's experience and the social context. Each of these elements, the individual and the context, are, in turn, endlessly complex. Considerations like the person's identity, background, past experiences, and culture are all relevant.
- It is self-reinforcing: Feelings of belonging are so impactful because they influence other actions which further increase belonging. This recursive loop can, of course, also be negative. However, consider a student whose sense of belonging prompts them to join an afterschool activity, and this experience further increases their belonging and they then are more willing to participate in class.

There are several negative consequences to feeling disconnected. Lack of belonging is related to increased feelings of stress, aggression, with more self-defeating behaviors and impairment of intellectual performance, and poor self-control. These symptoms are more prevalent in minority groups who are likely to experience marginalization in institutions (Baumeister, 2011, 137).

An interesting characteristic of connectedness is that it is a perception. That is, nobody can simply tell you that you belong. People develop a feeling of connectedness through the quality of their relationships and the cues from an environment. Yet, it is also more than having friends. A person might have multiple friends and still feel disconnected; conversely, someone may have few close friendships in a classroom or and feel like they are part of something. Instead, a sense of belonging or connectedness develops as people ask themselves a series of questions, including:

- Does Anyone Here Even Notice Me?
- Are There People Here Whom I Connect To?
- Do People Here Value (People Like) Me?
- Is This a Setting in Which I Want to Belong?
- Can I Be More Than a Stereotype Here?

How people answer these questions will determine the strength of feelings of connectedness. These feelings are complex and developed through the interpretation of many factors; as Walton and Brady (2017) write, it is a

...general inference, drawn from cues, events, experiences, and relationships, about the quality of fit or potential fit between oneself and a setting. It is experienced as a feeling of being accepted, included, respected in, and contributing to a setting, or anticipating the likelihood of developing this feeling. (p. 272).

Because it is a perception, its development is also complex; subtle signals, a misinterpreted word, a fleeting moment, these can all impact one's sense of connectedness.

Connectedness is important for schools because in the absence, people can experience a sense of "belonging uncertainty." When belonging is in doubt, questions may arise about one's place in an environment (REV), and thus impact motivation. People from marginalized groups are particularly susceptible to such feelings because they might see others like them repeatedly miss out on rewards, or they encounter prejudice:

Given this context, it is understandable and even adaptive for minority group members to be sensitive to the real and potential quality of their social relationships. This state of belonging uncertainty can prove especially pernicious, because it can manifest neither as perceived bias nor as a fear of being stereotyped — concerns tied to specific individuals (e.g., people who are plausibly racist) and evaluative contexts (e.g., performance examinations). Rather, belonging uncertainty may take the form of a broad-based hypothesis that "people like me do not belong here." (Walton & Cohen, 2007, 82-83)

Schools can work against a sense of belonging through actions such as rewarding achievement over belonging, or treating connections with others as a reward for compliance rather than a precondition for success (Osterman, 2000). Schools can also foster a sense of "stereotype threat" in minority students. Such students may carry the stigma of underperformance due to identity markers and thus bear the additional pressure of confirming predominant negative stereotypes. The fear of confirming negative stereotypes has been shown to have marked impacts on student achievement (Steele, 2007, 420).

A range of strategies have been shown to increase feelings of belonging and student achievement. For example, normalizing feelings of belonging uncertainty through hearing from other minorities can reduce achievement disparities ((Walton & Cohen, 2007, 2011; see also Walton et al., 2015; Yeager et al., 2016). Learning about the experiences of others can reduce stress and increase school performance (Stephens, et al., 2014). Value affirmation exercises, in which students wrote about their most important values in an in-class exercise at the beginning of seventh grade, improved the grades of black students and reduced the likelihood that they would be recommended to remedial courses (Cohen, et al., 2009). And, simple messages that reduce the stigma of minority underperformance can reduce negative effects of stereotype threat (Steele, 2007, 420)?.

These studies, and the theories discussed above, show how feelings of connectedness are important to students in schools. Indeed, we've spent considerable time discussing connectedness because it creates the foundations upon which students (and people) build their capacity to put forth effort, persist in the face of challenges, and take the risks that are necessary for learning. This is why a culturally responsive stance can be so powerful, one that builds trust by valuing the diverse experiences students bring to school, that begins from the strengths all students possess, and that sends messages to students that they are important (Hammond, 2014). Through the curriculum, the learning materials, and the messages teachers send, they have a critical role in helping students answer their own personal questions about belonging.

Self Determination Theory: Agency, Connectedness, and Mastery

Connectedness is an important part of people's wellbeing in schools, and along with agency and mastery can support student empowerment. Deci & Ryan's Self-Determination Theory (SDT) brings these three elements together into a theory of motivation and success. They use the term "autonomy" for "agency" and the term "Competence" for "mastery," and though these terms are not necessarily interchangeable, there is considerable overlap.

We've already discussed the fundamental importance of connectedness (which Deci & Ryan term "relatedness"), but SDT suggests that feeling competent and feeling autonomous are also vital human needs. They argue that these are not just "nice to haves," but quite literally needs; like water for plants, experiencing connectedness, autonomy, and competence are essential to motivation, goal-setting, and wellbeing (2000). When these are not met, they can lead to a downward spiral.

Agency

To exercise agency is the ability to exercise personal capabilities in making an impact on the world (Bandura, 2006). Agency is a deeply human idea, one that empowers us to face the challenges around us and influence the course of events. But agency isn't a given; people can also feel alienated, disempowered, or marginalized. In a world where our actions are closely monitored and many entities compete to command our decisions, agency is a statement by an individual that they can still control their own destiny.

It is also a basic human need. Calling it "autonomy," Ryan & Deci define this element as "the psychological need to experience self-direction and personal endorsement in the initiation and regulation of one's behavior," (Ryan & Deci, 2017). Schools are often highly controlled environments where both physical

movements and the actual content of learning are heavily regulated. Indeed, teachers might seek to seize control in their classrooms because they equate control with structure, they want to combat passivity in students, or they sense that being in charge is culturally valued from teachers (Reeves, 2009). The impacts on students are notable; when someone controls students, they are likely to experience pressure to think, feel, and act in a certain way. By contrast, teachers who support autonomy can build deeper intrinsic motivation, curiosity, and the desire for challenge (Niemiec & Ryan, 2009).

One way to support autonomy is through offering choices. The ability to choose certain parameters in learning can influence the quality of learning, yet even this dynamic is culturally mediated. In an oft-cited experiment, Iyengar & Lepper (1999) went to a school in the city of San Francisco, California, and gave a series of puzzles to both immigrant students from East Asia and students born in the United States. For both groups, they further offered some students a choice of the types of puzzles to solve, while others were told which puzzles to solve. Native-born students solved more puzzles when they were offered a choice, whereas immigrant students performed better when the teachers made the choice for them; this suggests that choice may be perceived differently based on cultural factors.

Agency can also be supported by building the confidence of students in their abilities to carry out specific tasks. This is called self-efficacy, and it is different from other types of more general confidence (like self-esteem or locus of control). Instead, self-efficacy is a personal belief that one can undertake a specific task, from physical to academic to social tasks (Bandura, 2006). Self-efficacy beliefs usually take the form of statements of "I can do x," and these become a powerful component of personal agency. They are not always correlated with strong skills, but people can possess developed skills without the belief that they can execute them. Across a range of domains, including overcoming phobias, exercise, weight loss, and academics, people who have strong self-efficacy beliefs have shown they're willing to take on challenges, put forth greater effort, and persist in the face of difficulties (Bandura, 1997).

Teachers can support autonomy in several other ways. Teachers can provide explanatory rationales for school tasks. In one study, when university students received a clear rationale for an uninteresting activity they showed greater engagement and learning (Jang, 2008). By acknowledging and accepting students' negative reactions, teachers can normalize failure and communicate patience in the learning process. Teachers can nurture inner motivational resources by supporting students with goal setting, self-regulation, and value identification. Using invitational (or non-controlling) language – for example, avoiding phrases like "should," "must," and generally pressuring vocabulary – can help students make decisions for themselves. And, by actively working to acknowledge students' perspectives, teachers can show students that their voices matter in class (see Table 1, Reeves, 2009).

Mastery

Everyone likes the feeling of mastery; it is motivating, fulfilling, and a great source of confidence. Self-determination theory calls this element "competence," and it posits that this is the third basic psychological need that is central to human actions. Mastery is developed through confronting real challenges. While facing challenges can be stressful, they also bring out the best in people. They can focus our attention, raise our effort, push us to our limits, and when we see progress, they are a great source of fulfillment. Even more fundamentally, the very act of confronting challenges in the pursuit of mastery brings its own source of reward. Conversely, when people are not challenged and do not develop a feeling of competence or mastery, their engagement decreases and learning is hampered.

The importance of mastery experiences in schools was vividly illustrated in a study (Jean Anyon, 1981). She was interested in the quality of academic tasks that students were given in different schools, so she visited elementary schools across a range of socioeconomic contexts. In wealthy, elite schools, she noticed that students were given rich, creative, and highly engaging tasks. Students were active in these classes, participating freely and even joyously.

When she visited working class schools, she found students were given rote tasks that required little thinking, no creativity, and instead valued compliance. Here she noted that students were bored, disinterested, and showed little enthusiasm for schools.

The implications are staggering. In a vicious cycle, teachers might assume that poor students are ill-prepared for challenging tasks, and thus present their students with low-rigor tasks that lead to little learning, which, in turn, prompts teachers to give more low-rigor tasks. Zaretta Hammond (2015, pp. 14-15) has argued that authority figures label students low or below grade level, we underestimate what students are capable of doing, postpone challenging tasks indefinitely, and focus on basics while depriving students of meaningful and motivational learning.

Working toward mastery can be immensely rewarding. Unlike simple physical pleasures from things like food and comfort, the feelings derived from mastery, and working toward mastery, are much more fulfilling. Through studying highly successful individuals in a wide range of domains, such as chess players, dancers, spelling bee participants, and surgeons, Mihaly Csikszentmihalyi developed a theory of optimal experience. He argued that when people feel appropriately challenged, they experience a heightened feeling of pleasure and satisfaction. The tasks people engaged in were not easy. Indeed, that is the point: by engaging in difficult tasks, perhaps with support, people can enjoy a unique experience of fulfillment. Csikszentmihalyi came up with the term "Flow" to capture the feeling of engaging with challenging tasks. He described this "flow state" as:

An optimal psychological state that people experience when engaged in an activity that is appropriately challenging to one's skill level, often resulting in immersion and sustained concentrated focus on a task. This can result in deep learning and high levels of personal and work satisfaction. (1990).

The key for a "flow state" is to provide optimal experiences. Experiences that are too easy can lead to boredom, while those that are too difficult can lead to anxiety and stress. One implication of this theory is that teachers need to create different experiences for individual students. Another implication is that, because the level of challenge is what matters, any task can be rewarding if it supports the development of mastery. Last, because a flow state is one of continuous learning, feedback plays a critical role.

One element of strong feedback is that it should give information about one's effort or skills, which are malleable, rather than information about traits that are assumed to be fixed such as intelligence (Dweck, 2009). Because it involves critique, however, it can be challenging to share feedback without mutual trust. In such conditions where people are uncertain of their belonging or distrust their teachers, a "wise" approach to feedback can help. "Wise" feedback communicates high expectations to students alongside deliveries of critiques, thus giving clear suggestions while reaffirming a belief in success. This type of feedback shows how to improve academic performance and support mastery (Cohen, Steele, and Ross, 1999; Yeager et al., 2014).

Conclusion: Building Awareness through Learning

We opened this memo with a vision of a student "not-learning." Now, we have a better idea what contributes to a student fully engaging or opting out of school. We've discussed how connectedness, agency, and mastery, the three elements of self-determination theory (SDT), are almost universal to humans. We all have a basic need to experience meaningful relationships, a sense of control over their lives, and feelings of competence. In this concluding section, we'll see how addressing these foundational needs are part of the important project of teaching young people that they are valuable, that their voice matters, and that they can make a difference.

When people have their needs for connectedness, agency, and mastery met, they are more likely to lead healthier and more fulfilling lives. They make healthier choices, face fewer mental health challenges, and

express greater contentment (Ryan et al., 2008). We've already discussed some of the ways that teachers can support connectedness, agency, and mastery, for example, by using the environment to send messages of belonging, by supporting autonomy through nurturing students' inner motivational resources, and by creating optimal learning experiences with quality feedback. But there are even more compelling reasons for supporting these needs: Through meeting these basic psychological needs, people can develop a strong sense of who they are, the needs of the society around them, and their ability to influence others (Bandura, 2001).

This general "awareness" covers students' developing identities, their recognition of the needs of their community, and their ability to critically question the assumptions that structure their world. A key point is that schooling has an important role in this developing sense of self. As students discover who their friends are, which social groups they are a part of, which skills they are confident in and which domains they have control over, they begin to create their identity. This identity might, in turn, come with its own social responsibilities (Appiah, 2010). As mentioned in the beginning, viewing schools in this way can shift thinking about what the primary effects of school are. Certainly, schools are places of learning, but as that occurs students are also discovering, or creating, their own identities.

Theories of culturally responsive practices provide a powerful way to re envision how schools can support students in both learning and developing healthy identities. At its most basic level, culturally responsive pedagogy is a way to lower threats to students' sense of belonging. It asks educators to start by recognizing the strengths students bring to school, to acknowledge the diverse cultural assets that students possess, and then use those to make learning accessible. Years of ethnographic research has shown how teachers who demonstrate cultural competence and affirm students' cultural identity can build trust with racially and ethnically diverse classroom communities in ways that encourage deep engagement. Such teachers communicate to all students that they are important, valued, and that they belong. When students feel a deep sense of belonging, they are more likely to put forth effort and take risks (Gay, 2018; Nieto & Bode, 2018; Hammond, 2014).

At a deeper level, culturally responsive approaches ask teachers to interrogate the very structures of schooling and society. Given that our society is defined by great inequality and massive imbalances in resources, teachers have an opportunity to use their instruction as a vehicle to help students recognize the world we live in (Gay, 2018). To do so without the strong foundation of connectedness, agency, and mastery, could be disheartening, alienating, and disempowering. Yet, by bolstering the inner resources of students by meeting their basic needs, teachers can set the stage for transformational change.

By starting from a place of "love and connectedness," the work of teachers is subtly but powerfully changed. It doesn't displace or discount academics; indeed, as we've seen, challenging and meaningful work is a rewarding necessity. However, we have the power to choose, as our starting point, to make classes and schools places where we unequivocally send the message to students that they matter, that they are capable, and that they can make a difference in the world.

References

Anderman, E. M., & Gray, D. L. (2017). The roles of schools and teachers in fostering competence motivation. In Elliot, A.J., Dweck, C.S., and Yeager, D.S. (Eds.) *Handbook of competence and motivation: Theory and application*, Guilford Press: New York. pp. 604-619.

Anyon, J. (1981). Social class and school knowledge. Curriculum Inquiry, 11(1), 3-42.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26.

Bandura, A., (1997). Self Efficacy: The Exercise of Control. New York: W.H. Freeman & Company.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, 117(3), 497.

Byrd, C. M. (2016). Does culturally relevant teaching work? An examination from student perspectives. SAGE Open, 6(3).

Cohen, G. L., Steele, C. M., & Ross, L. D. (1999). The mentor's dilemma: Providing critical feedback across the racial divide. *Personality and Social Psychology Bulletin*, 25(10), 1302-1318.

Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. Harper & Row.

Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian psychology/Psychologie canadienne*, 49(3), 182.

Dweck, C. S. (2008). Mindset: The new psychology of success. Random House Digital, Inc.

Gay, G. (2018). Culturally responsive teaching: Theory, research, and practice (Third ed.). New York, NY: Teachers College Press.

Hammond, Z. (2014). Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students. Corwin Press.

Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: a cultural perspective on intrinsic motivation. *Journal of personality and social psychology*, *76*(3), 349.

Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. New York: Cambridge University Press.

Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and research in education*, 7(2), 133-144.

Nieto, S., & Bode, P. (2018). Affirming diversity: The sociopolitical context of multicultural education (7th ed.). New York: Pearson

Jang, H. (2008). Supporting students' motivation, engagement, and learning during an uninteresting activity. *Journal of Educational Psychology*, 100(4), 798.

Reeve, J. (2009). Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational psychologist*, 44(3), 159-175.

Ryan, R. M., Patrick, H., Deci, E. L., & Williams, G. C. (2008). Facilitating health behavior change and its maintenance: Interventions based on self-determination theory. *The European health psychologist*, 10(1), 2-5.

Walton, G. M., & Brady, S. T. (2017). The many questions of belonging. In Elliot, A.J., Dweck, C.S., and Yeager, D.S. (Eds.) *Handbook of competence and motivation: Theory and application*, Guilford Press: New York. pp. 272-293.

Walton, G. (November 17, 2021). Stop Telling Students 'You Belong!' *Education Week*. 41(13), p. 20. https://www.edweek.org/leadership/opinion-stop-telling-students-you-belong/2021/11

Yeager, D. S., Purdie-Vaughns, V., Garcia, J., Apfel, N., Brzustoski, P., Master, A., ... & Cohen, G. L. (2014). Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the racial divide. *Journal of Experimental Psychology: General*, 143(2), 804.