

An Examination of Teacher Motivation in a Self-directed Model of Professional Learning

Douglas Walker, Ph.D., School District of the Chathams
Nicole Barnes, Ph.D., Montclair State University
Helenrose Fives, PhD, Montclair State University

Corresponding author: Nicole Barnes
Email: NBarnes@apa.org

Given the demands of revised student learning standards, today's teachers face mounting pressure for their students to produce content knowledge and skills ensuring a successful transition to college and careers. An emphasis on teacher learning and professional development has been at the forefront of this transition to best prepare teachers to meet these learning goals. We sought to understand how a self-directed model of teacher professional learning, GO-Time, influenced teachers' motivation to engage in professional learning and produce learning outcomes. We used Self-Determination Theory as a frame to understand teachers' experience of motivation in this self-directed learning program. Twenty-seven teachers from a suburban district in the northeast US completed an online questionnaire including Likert-type scales (i.e., independent variables: needs satisfaction, perceived autonomy support, perceived work engagement, teaching self-efficacy (TSE); dependent variable vitality) and open-ended questions. Descriptive statistics and correlation analyses for RQ1 revealed moderate, statistically significant relationships between vitality and engagement ($r=0.45$, $p<0.05$) and between vitality and TSE ($r=0.38$, $p<0.05$). These findings suggest that higher levels of engagement and TSE are associated with higher levels of teachers' sense of vitality. For RQ2, multiple regression results indicated that engagement emerged as a significant predictor of teachers' sense of vitality ($\beta=0.48$; $p<0.05$), while autonomy support, needs satisfaction, and TSE were not significant predictors. This highlights the critical role of teachers' active involvement and enthusiasm in enhancing their sense of vitality. Qualitative analyses revealed that teachers in this professional development model reported a sense of perceived professionalism, a direct connection or relevance to their practice, and an environment conducive to their engagement. Significance and implications for practice are discussed.

Keyword: self-determination theory, teachers, professional development, teacher motivation

An Examination of Teacher Motivation in a Self-directed Model of Professional Learning

Traditional professional development often consists of teacher educators or teacher leaders deciding *for* teachers what they will do during allocated professional development time. According to Darling-Hammond (2017), and Smith and Reynolds (2014) traditional professional development programs lack a direct connection to specific content, active learning strategies, sustained learning, reflection on practice, and prior assessment of individual teacher needs. It is not surprising then that when studied empirically such one-time workshops, plagued with PowerPoint presentations, handouts, and short-term discussions, failed to result in prolonged teacher growth or sustained changes in practice (Darling-Hammond et al., 2017).

In response, scholars have advocated for reform oriented professional development activities that call for active engagement and agency on the part of teachers (Imants & Van der Wal, 2020;). Imants and Van der Wal (2020) framed professional development around five characteristics: active teacher engagement, dynamic relationships, contextualized professional learning, variation in content (i.e., what is to be learned), and as continuous. Reform oriented professional development programs that are sensitive to these characteristics increase teachers' willingness to learn, the anticipated outcomes to learning, and their engagement in professional learning. But for these reformed versions of professional development to transition from *professional development* to *professional learning*, they must focus on active learning *embedded within a teacher's own work* (Darling-Hammond, et al., 2017).

Scholars have conceptualized teachers' *professional learning* as "a product of both externally provided and job-embedded activities that increase teachers' knowledge and help them change their instructional practice in ways that support student learning" (Darling-Hammond et al., 2017, p. 2). Effective professional learning: "(a) Is **content focused**, (b)

MOTIVATION & SDPL

Incorporates **active learning** utilizing adult learning theory, (c) Supports **collaboration**, typically in **job-embedded contexts**, (d) Uses **models and modeling** of effective practice, (e) Provides **coaching and expert support**, (f) Offers opportunity for **feedback and reflection**, and (g) Is **sustained in duration**” (Darling-Hammond et al., 2017, p. 4, emphasis in original).

Just as instruction in the classroom should be student-centered, instruction for teachers should be teacher-centered recognizing and attending to teachers’ identity, beliefs, and perceived learning needs (Noonan, 2019). Specifically, teacher-learners should be positioned as a source for identifying their own learning goals. That is, teachers should establish the purpose of their professional learning activities, which starts with a self-assessment of needs thereby providing teachers a voice in identifying areas for growth (Wei et al., 2010). Allowing them to self-select learning goals tailored to their lived experience.

Importantly teachers’ professional learning occurs informally throughout their career as a process of tinkering or teacher research (Hargreaves, 1999; Imants & Van der Wal, 2020; Sancar et al., 2021). According to Hargreaves (1999), tinkering is a self-directed process that allows teachers to incorporate learning into their everyday activities. Specifically, Hargreaves (1999) claimed: “[t]inkering is embedded in the process of professional knowledge creation, since this is a means of testing and modifying an initial ‘good idea’ into something worth subjecting to more systematic validation” (p. 131). Hargreaves (1999) argued that teacher learning through teacher research or tinkering is highly effective. Teacher reflection on practice through the process of tinkering and self-directed learning aligns with transformative approaches to professional learning by positioning the power of decision with the teacher (Kennedy, 2014).

Teachers’ Perceptions of Professional Learning.

Scholars have conducted a significant amount of research regarding teachers’ perceptions

MOTIVATION & SDPL

of professional learning that spans at least two decades (e.g., Bautista & Wong, 2019; Lay et al., 2020; Martin & González, 2017; McKeown et al., 2019). The combined findings from this line of research has led to a shift in thinking regarding what attributes are most influential to teacher learning.

For example, Martin and Gonzalez (2017) conducted a qualitative study of five high school mathematics teachers to understand what they valued in professional learning opportunities. The aim of these researchers was to understand how engagement in lesson study influenced their perceived value of professional learning, specifically, the “why” of learning. The participants engaged in two iterations of a lesson study. Teachers met monthly in study groups for three hours. During this process, the teachers watched and discussed animated cartoon depictions of several versions of geometry lessons, collaboratively planned and implemented a lesson on the same topic, and then watched and discussed videos of their own students participating in the lesson. They then revised the lesson and repeated the process. Analysis of the data uncovered that teachers found an explicit focus on content knowledge and instructional practices that were directly applicable to their practice to be most beneficial to their learning progress.

Penuel et al (2007) conducted a study of 454 teachers who took part in a scaled professional learning program on science instruction. The participants for this study were geographically diverse and the methods of instructional delivery were equally diverse. The findings revealed that teachers valued the learning opportunity when the content was aligned to their curriculum, standards, and learning goals. The focus on embedded context, (with immediate application to practice), as well as sustained duration were cited by the participants as contributing to their perceived value of the learning opportunity.

MOTIVATION & SDPL

The research on perceptions of professional learning points to a need for programs that draw upon the experiences of the individual participants and are directly applicable to those participants' needs. In addition, a shift from isolated workshops to sustained, individualized, and personalized professional learning programs accentuate the individual's feelings of autonomy and the development of competence (Ryan & Deci, 2020). For instance, Fullan (2020) suggested that professional learning is more likely to be successful if it takes place close to the teacher's working environment, provides opportunities for reflection and feedback, involves a conscious commitment by the teacher, and makes use of external expertise such as consultants or critical friends to build capacity. Teachers' perceptions and experiences can provide valuable insights into the relevant aspects of effective professional learning programs, such as the alignment of content with curriculum and standards, the use of active learning strategies, and the importance of sustained and intensive programs (Bautista & Wong, 2019; Martin & González, 2017; McKeown et al., 2019).

Despite this consensus on what constitutes effective professional learning design, there is a lack of consensus on what motivates an individual teacher's willingness to learn (Gorozidis & Papaioannou, 2014; Power & Goodnough, 2018;). Self-directed professional learning is a design that seeks to shift the focus of the learning to the individual needs of the teacher by providing the opportunity to self-select their learning goals and learning process.

The influence of self-directed learning on teachers' perceptions of learning activities and its influence on practice is an important area for exploration. Smith and Reynolds (2014) found that teachers viewed the model of single episode events or workshops imposed on them as an exercise in compliance, leaving them with limited or no choice in their professional development activities. This study of 1,300 teachers found that teachers who choose all or most of the

MOTIVATION & SDPL

professional development opportunities they engaged in were greater than two times more satisfied with their professional development than those with fewer options. The authors found that teachers who were provided autonomy concerning professional development reported feeling treated like professionals. They expressed a great deal of satisfaction with the opportunities presented to them. These findings suggest that the shift from compliance to active choice is a shift from extrinsic motivation to intrinsic motivation to engage in professional development.

Power and Goodough (2018) conducted a qualitative case study of six elementary school teachers tasked with self-directed professional development in the area of STEM integration. The program provided participants the opportunity to self-select an action-research learning project and direct the planning of such activities. In addition, the school district provided participants with release days and access to resources to conduct their inquiry based learning. The study revealed that the program was successful in accommodating the teachers' needs to feel competent, related, and autonomous. By offering the teachers choice, encouragement, and feedback, the teachers reported that the program supported their willingness to engage in the learning. A significant theme within this qualitative study was the importance of time and available resources. These factors contributed to a feeling of autonomous support and are supportive of the tenants of Self-Determination Theory (Ryan & Deci, 2020).

Theoretical Framing: Self-Determination Theory (SDT)

Professional learning is dependent upon an individual's motivation to learn or improve. Extrinsic motivators in professional learning exist through district directives, initiatives, supervision, and evaluation. Intrinsic motivation for professional learning may be a result of interest, curiosity, and values (Morris et al., 2022). SDT looks at the intersection of these

motivators. Ryan and Deci (2020) suggested that motivation is dependent upon three psychological needs of autonomy, competence, and relatedness. When conditions exist that support these needs, motivation is nurtured and positively influences engagement, mastery, and synthesis (Power & Goodnough, 2018). *Autonomy* is the perception of being in control of one's own behavior. Ryan and Deci stated that autonomy is internalized when individuals feel they have choices and the context in which they operate allows for self-determination and a sense of ownership. The psychological need for *competence* is the need for individuals to feel effective or that they are increasing their capacity to be effective (Ryan & Deci, 2020). However, simply developing skills and constructing knowledge are insufficient unless teachers also have self-efficacy (confidence) to utilize new skills and knowledge in their context. *Relatedness* is the need to feel connected to others; to have a sense of belonging. When individuals feel that they are included, valued, and respected their sense of relatedness is enhanced (Power & Goodnough, 2018; Ryan & Deci, 2020). There are contending views among researchers as to the psychological need, requirements, and significance of relatedness for teachers' intrinsic motivation (Dursken et al., 2017). In teaching, relationships with students appear to be most important. However, in the context of professional learning, relatedness with colleagues may be more salient; albeit the strength of that relationship is unclear.

Purpose of the Current Study

Teacher motivation is recognized in education research as an important consideration when seeking to implement change or improve practice (Slemp et al., 2018). Yet, absent from the characteristics of effective professional learning development programs identified by Darling-Hammond and colleagues (2017) was a recognition of the role of teachers' motivation to pursue and engage in professional learning. While the characteristics identified describe the

MOTIVATION & SDPL

content and process for effective professional learning, simply having a good program does not necessarily motivate teachers to participate in and learn from it. Therefore, the purpose of the current investigation was to understand how a self-directed model of teacher professional learning, GO-Time, influenced teachers' motivation to engage in professional learning and produce learning outcomes. Specifically, we sought to answer the following research questions:

1. What are the relationships between teachers' engagement, teaching self-efficacy (TSE), and their sense of vitality in response to GO-Time?
2. To what extent do teachers' perceptions of autonomy support, work-related needs satisfaction, TSE, and engagement predict their sense of vitality in response to GO-Time?
3. What patterns in motivation emerge in teachers' descriptions of their GO-Time experience?

With regard to RQ1, we hypothesize that there will be positive relationships among teachers' engagement, their sense of vitality, and their TSE. With regard to RQ2, we hypothesize that teachers' perceptions of autonomy support, work-related needs satisfaction, TSE, and engagement will significantly predict their sense of vitality. Overall, we anticipated that findings from this study would help us understand the interdependency of teachers' motivation and their engagement in professional learning opportunities.

Method

GO-Time was the model of professional learning designed by the School District of the Chambers¹ (CSD) which provided all teachers the opportunity to self-select and self-direct their professional learning goals and activities for the academic year. Teachers did this by critically

¹ School name is a pseudonym

MOTIVATION & SDPL

reflecting on their practice and the needs of their students. Reflection was facilitated by an administrator during an annual summative review and through teachers' annual self-reflections. However, teachers had autonomy to select their learning goal(s) and direct their own learning in the area(s) they identified. CSD provided one hour a month on Mondays and a series of delayed opening and early dismissal days with two-hour blocks for teachers to engage in GO-Time. In addition to the allocated time, the district purposefully purged top-down professional learning directives not mandated by the State Department of Education allowing teachers to avoid managing multiple learning goals and limited extrinsically assigned learning goals. To further support teachers in their learning goals the district established a series of learning labs, which were collaborative learning teams made of teachers with shared interests. Examples included lesson studies or integration of instructional strategies such as the Universal Design for Learning Framework. All teachers could attend any learning lab even those not connected to their individual GO-Time learning goal(s).

Context

The context for this study was CSD, a school district in the northeast United States. At the time of the study, CSD served approximately 3,000 families, whose average median household income was \$163,000. CSD enrolled approximately 4,200 PK-12 students in six school buildings. Students were White (77.9%), Hispanic (5.5%), Black (0.6%), and Asian (11.5%). Few (0.7%) students identified as emergent bilinguals. CSD employed 345 teachers who identified as White (95.4%), Hispanic (1.4%), Black or African American (.09%), and Asian (2%).

Participants

Participants included 27 K-12 teachers; the majority were White (96%), female (89%),

MOTIVATION & SDPL

and between 46 and 55 years old (44%). The majority of the teachers held graduate degrees (56%; see Table 1). Most had more than four years of experience (67.5%).

<<Insert Table 1 here>>

Data Sources

We collected data using an online questionnaire. Participants responded to all measures using a 7-point Likert type scale in addition to four open-ended items. Responses to the scales demonstrated acceptable reliability ranging from .69 to .93 see Table 2 for scale specific Cronbach alphas.

Work-related Basic Needs Satisfaction

We used the Work-Related Basic Need Satisfaction (W-BNS) scale to assess the degree to which participants perceived their basic psychological needs were met in the workplace (Van den Broeck et al., 2010). Participants responded to 18 items evaluating need satisfaction for competence (e.g., At work, I feel part of a group), autonomy (e.g., I really master my tasks at my job), and relatedness (At work, I feel part of a group). Participants responded on a 7-point scale (1=completely disagree; 7=completely agree). Van den Broeck et al. (2010) developed this measure and across four participant pools ranging in size from 170–560 found the subscales demonstrated acceptable reliability (averages α 's across the samples: competence α =.85; autonomy α =.81; and relatedness α = .82).

Perceived Autonomy Support

Similar to Klassen et al (2011) we adapted the 6-item short form of Baard et al.'s (2006) Work Climate Questionnaire (WCQ), designed to assess workers' perceptions of their manager's autonomy support, by replacing "manager" with "principal/supervisor" as needed. We measured

MOTIVATION & SDPL

teachers' perceptions using a 7-point scale (1=strongly disagree/ 7=strongly agree). A sample item from this scale was "I feel that my principal/supervisor provides me choices and options."

Across two studies Klassen et al (2011) reported Cronbach's alpha of .95 in study 1 ($n=409$ teachers) and .96 in study 2 ($n=455$ practicing teachers).

Perceived Work Engagement

We adapted the nine items of the short version of the Utrecht Work Engagement Scale (Schaufeli et al., 2006) to assess teachers' engagement in GO-Time. We amended items to direct teachers to focus on their GO-Time experience as they responded. For instance, we amended the original item "At my work, I feel bursting with energy" to "I feel bursting with energy when I work on my GO-Time project" (Schaufeli & Bakker, 2006, p. 21). The scale included three subscales: Vigor, Dedication, and Absorption. Engagement was determined using a 7-point scale (1: never - 7: always). Klassen et al (2011) conducted an international validation study of this scale and reported that the scale returned higher levels of internal consistency when used as a single factor, which is how we treated the data in this study.

Teaching Self-Efficacy

We used the short form of Tschannen-Moran and Hoy's (2001) Teaching Self-Efficacy scale (TSES). Items included "How much can you control disruptive behavior in the classroom." Responses ranged from one (nothing) to seven (a great deal) with higher scores indicating a greater sense of perceived efficacy for completing that particular task. The TSES was developed through multiple rounds of item generation and testing. Fives and Buehl (2009) examined the factor structure of both the long and short forms of the TSES with both preservice and practicing teachers and found that both versions lead to similar

MOTIVATION & SDPL

results with the long form having a slightly larger reliability score among practicing teachers (long: $\alpha=.93$; short: $\alpha=.86$). In addition, they provided some evidence of the validity of TSES such as teachers with 10+ years experience demonstrated significantly higher levels of self-efficacy for teaching as is expected based on the theoretical models of self-efficacy.

Vitality

We measured vitality with the Subjective Vitality Scale (Bostic et al., 2000), which included six statements that participants rated from 1 (not true at all) to 7 (very true). Each statement (e.g., “I feel alive and vital”) was in response to the same prompt: “After participating in GO-Time professional learning...”

Open-Ended Items

We asked participants four open-ended questions about GO-Time: (a) How does the “Go time” initiative differ from other professional development initiatives you have been a part of? (b) What are the strengths and weaknesses of this initiative? (c) What challenges have you found regarding this initiative? And (d) Is there anything else you would like to share regarding the influence of GO-Time?

Procedure

After receiving approval from our institution's internal review board for research with human subjects that required site approval from the school district, the Assistant Superintendent of CSD sent invitations to complete the online questionnaire to all district faculty members, twice. Participation was voluntary. We informed teachers that their identity would not be known by the research team or the CDS administration.

Data Analysis

To address research questions one and two we calculated descriptive statistics, and

MOTIVATION & SDPL

conducted correlational and multiple regression analyses to explore the relationship among independent variables: basic needs, autonomy support, work engagement and teaching self-efficacy, with the dependent variable: teachers' sense of vitality related to their teaching. We used multiple regression because it allowed us to predict teachers' sense of vitality based on multiple factors simultaneously. To address research question three, we employed Braun and Clark's (2006) six phase process for thematic analysis: familiarization, initial code generation, theme search, theme review, name and define themes, report production; to analyze responses the open-ended questions. We engaged in abductive reasoning to examine the themes identified in our theme search in light of existing theory on teacher motivation and professional learning. We looked explicitly for confirming and disconfirming evidence of both our themes and extent theory in teacher motivation. We engaged in iterative cycles to refine, rename, and define themes based on this work. We drafted an explicit thematic map with exemplars from the data to fully support the explanation of themes.

Results

Table 2 presents the descriptive statistics and correlation matrix used to answer RQ1. The correlational analyses revealed two moderate, statistically significant relationships, between vitality and engagement and between vitality and TSE. Specifically, the correlation between vitality and engagement was ($r=0.45$, $p<0.05$), and the correlation between vitality and TSE was ($r=.038$, $p<0.05$). These findings suggest that higher levels of engagement and TSE are associated with higher levels of teachers' sense of vitality.

<<Insert Table 2 here>>

Regarding RQ2, results of the multiple regression suggested an acceptable overall model fit ($F= 3.67$; $p= .01$). The model included teachers' perceptions of their autonomy

support, their work related needs satisfaction, TSE, and engagement as predictors of teachers' sense of vitality. The regression coefficients indicated that neither teachers' perceptions of their autonomy support ($\beta = -.31$; $p > .05$), their need satisfaction ($\beta = .24$; $p > .05$), or TSE were significant predictors ($\beta = .23$; $p > .05$). However, engagement emerged as a significant predictor of teachers' sense of vitality ($\beta = .48$; $p < .05$). The non-significant predictors (autonomy support, need satisfaction, and TSE) suggest that these factors, while potentially important in other contexts, did not significantly contribute to the variance in teachers' sense of vitality in this study. This could be due to the specific participant characteristics or the unique context of the study. The significant predictor, engagement, highlights the critical role that teachers' active involvement and enthusiasm in their work play in enhancing their sense of vitality.

To address RQ3, we identified two themes revealing teachers' perspectives on GO-Time: teacher-centered/teacher-directed and professionalism. These themes underscore the importance of providing teachers with opportunities to take charge of their professional development and maintain a high standard of professionalism in their teaching practices. We discuss these findings in more detail in the next section.

Teacher-Centered and Teacher-Directed: “You are personally invested in the process because you create it and tailor it to your own personal needs/interests!” (21_E_14)².

Participants reported that GO-Time was relevant to their practice and was

²The quotes we provide for the teachers are coded by a randomly assigned identification number, the grade level taught (i.e., E=elementary, M=middle, H=highschool), and the years of teaching experience reported. For instance code 10_H_9, indicated that the quote provided came from participant 10 who was a high school teacher with nine years experience.

MOTIVATION & SDPL

developmentally appropriate based on their needs, thus teacher-centered. Further, they reported that learning activities were shaped by their own strengths and concerns, thus teacher-directed. For instance, one teacher wrote, “I like how flexible it is and how I can focus on something I want to improve on, I am not forced to work on something that does not apply to my classroom” (11_H_6). Reflecting the teacher-centeredness of GO-Time, a teacher stated: “It has the opportunity to provide teachers with freedom to learn in areas of interest and focus on things that can be most beneficial to their students” (17_E_29). These excerpts suggest that when teachers’ selected their learning goals, ensuring teacher-centeredness, they found the choice to be beneficial.

Participants reported that GO-Time provided the opportunity to self-direct their learning. The process of self-directed learning involved evaluating needs, selecting a learning goal, and identifying the activities to achieve that goal. Teachers highlighted that GO-Time allowed them to focus and “dig deeper” (23_H_23) into targeted topics. One teacher shared: “It is [GO-Time] more focused on a singular idea — usually one that takes time and reflection to actually bring to fruition” (9_H_9). Throughout the responses however, teachers often added caveats about the need for self-monitoring. For instance, one elementary school teacher wrote “GO-time allows some level of teacher choice and self-direction. It also requires the teacher to take the initiative to fully follow through on the learning outcomes” (25_E_29). Thus, teachers recognized that for their learning to be teacher-centered and self-directed it requires the teachers to take up the responsibility for that learning; a requirement these teachers felt well able to meet.

Professionalism: “[GO-Time] validates the teacher as a trusted professional” (13_H_16).

Participants expressed that having autonomy to select their own learning topics engendered a perception of professional respect. This idea of respect was echoed by a high

MOTIVATION & SDPL

school teacher who commented: “It shows respect for us as educators by allowing us to self-assess what we are strong in and what we would like to improve. So much better than a ‘one size fits all’ approach” (10_H_9). We interpreted this teachers’ use of “respect” as a proxy for professionalism; she believed the use of GO-Time provided evidence that the administration believed teachers were capable of determining their own strengths and areas for improvement.

A sense of professionalism that was engendered through the implementation of GO-Time was echoed in the data, for instance one high school teacher wrote:

If we are viewed as professionals and trusted enough with this level of autonomy when it comes to guiding student learning, then why not grant us the same trust when it comes to our own learning? I highly recommend this professional learning model because it makes me feel the most valued and respected for the professional that I am (23_H_14).

This statement shows that teachers saw opportunities to exercise autonomy as evidence of recognized professionalism. Since GO-Time allowed teachers to select and plan their own professional learning opportunities, they believed they were trusted and valued as professionals.

Limitations

Our investigation is limited in that 27 teachers responded to our questionnaire. Further, there may be self-selection bias in our sample such that teachers who had positive experiences with GO-Time may have been more inclined to respond.

Discussion

Teachers in GO-Time reported a sense of vitality, perceived professionalism, and value for teacher-centered and teacher-directed learning all of which seem to be connected to the extent to which their psychological needs were experienced and supported.

Psychological Needs Supported

Self-determination theory argues that when learners' needs for autonomy, competence, and relatedness are met then learners can experience behavioral, cognitive, and emotional engagement (Guay, 2022). The GO-Time professional learning model provided teachers with support for these three needs through choice, structure, and involvement respectively and the data suggest that teachers' experiences of autonomy support and structure led to feelings of professionalism and engagement in professional learning. The findings of this study are consistent with and are supported by prior research which highlights the influence of teacher choice, self-direction, and agency influencing motivation to learn (Smith & Reynolds, 2014; Mushayikwa & Lubi, 2009).

Choice → Autonomy

The results of this study offer an opportunity to reconsider the design of teacher learning experiences in recognition of their perception of having a lack of autonomy to identify their personal learning needs. By not recognizing teachers' ability to determine their needs and providing an opportunity that prioritizes this process, professional development designers may diminish teachers' intrinsic motivation to engage in professional learning. Ryan and Deci (2020) stated that intrinsic motivation is dependent upon an individual's perceived autonomy, competence, and relatedness. Participants reported that choice in their selected learning goal influenced their self-efficacy and perceived this opportunity for choice as being treated like a professional. These findings support the research by Smith and Reynolds (2014) who found that teachers who were provided autonomy concerning professional learning reported feeling treated like professionals and are satisfied with their professional learning opportunities.

Structure → Engaged and Sustained Learning

Participants explained that having structure in the form of designated time and space for GO-Time paired with the removal of extrinsic learning goals their overall sense of satisfaction with professional development improved. Ryan and Deci (2020) reported that when individuals perceive support they experience intrinsic motivation which influences interest in the activity and improves learning and creativity. Participants reported the time, space, and consideration for their overall workload influenced their ability to engage and sustain their learning.

Involvement ≠ Relatedness

Throughout the qualitative data teachers' revealed involvement in their GO-Time projects that seemed to reflect feelings of intrinsic motivation. In some of the data, teachers commented about the ability to work with colleagues as an important component of GO-Time that was facilitated by the time allocated for these endeavors by the school district. However, this did not come out as a strong theme for the data we gathered. Research on the need for relatedness among teachers suggests that it is relationships with students that may play the most important role for satisfying this need (Klassen et al., 2011). However, recently Dursken et al. (2017) investigated the importance of relatedness among teachers engaged in collaborative professional development and found it to be significant in teachers' motivation for that professional development model. Given the emphasis on autonomy and choice in the GO-Time model it may be that teachers' did not feel a strong need for relatedness in relation to completing this aspect of their professional life. The majority of teachers mentioned in the qualitative data that they selected their learning with the aim to improve their teaching in ways that could directly benefit their students. Thus, it may be that the need for relatedness with their students was something they pursued in the selection of their learning goals.

Teacher-Centered and Teacher-Directed

Researchers concluded that teachers describe traditional professional development as being irrelevant, disconnected to their needs, and lacking in sustainability (Smith & Reynolds, 2014; Wei et al., 2010). Ball (2003) argued that teachers negatively perceive traditional models of professional development because they are not designed to recognize the role of teachers as individuals capable of critical self-reflection and self-directed learning. Instead, professional development is often designed as a holistic approach that favors the attainment of specific skills and practices aligned to student performance metrics or extrinsically placed goals. The results of this study suggest that the design of professional development activities that incorporate a reflective stance and self-direction has a likelihood of intrinsically motivating teachers and increasing their overall sense of vitality while engaged in new learning activities. These findings are consistent with and supported by prior research identifying self-directed learning opportunities influence on teacher autonomous motivation and engagement in professional learning (Gorozidis & Papaioannou, 2014).

New Professionalism

The self-directed nature of the design and the direct connection to practice and self-identified needs was perceived by teachers as a recognition of their self-perception of professionalism. The findings demonstrate a contrasting view by teachers to what Ball (2003) identified as the new professionalism. Ball's (2003) research identified a growing sense of performative and regulation extrinsically placed on teachers and reflected in the professional development activities they have been required to engage in. Performativity as explained by Ball (2003) is the increased need for teachers to spend more time addressing imposed accountability measures and reporting on actions and outcomes. Prioritizing measurement and accountability of

practice challenges teachers' efficacy to recognize and act on what they see as necessary, favoring what is measured. The perceptions of teachers engaging in GO-Time demonstrate that their prior experiences in professional development are most likely aligned with accountability measures and negatively influence their perception of professional development. Teachers reported that their prior experiences in professional development did not take into consideration their ability to personally reflect on their practice and utilize judgment to orchestrate their learning needs.

Conclusion

From this investigation we learned that GO-Time positioned teachers as the directors of their own learning thereby allowing them to develop competence in individualized areas of practice. Future research could explore the long-term impacts of the GO-Time professional learning model on teachers' instructional practices and student outcomes. Additionally, investigating the role of school leadership in supporting and sustaining such teacher-centered professional development initiatives could provide valuable insights. Another potential direction is to examine the differential effects of the GO-Time model across various educational contexts, such as urban, suburban, and rural schools, to understand its adaptability and effectiveness in diverse settings. Finally, further studies could delve into the specific mechanisms through which autonomy, competence, and relatedness contribute to teachers' professional growth and how these elements can be optimized in professional development programs. Considering teachers' motivational needs in designing professional learning experiences is essential to ensuring quality teaching and learning for all.

References

- Acheson, K. A., & Gall, M. D. (2011). *Clinical supervision and teacher development: Pre-service and in-service application*. Wiley
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2006). The work climate questionnaire. *Journal of Applied Social Psychology, 34*(10), 4. <https://doi.org/10.1111/j.1559-1816.2004.tb02690.x>
- Ball, S. J. (2003). The teacher's soul and the terrors of performativity. *Journal of Education Policy, 18*(2), 215–228. <https://doi.org/10.1080/0268093022000043065>
- Bautista, A., & Wong, J. (2019). Music teachers' perceptions of the features of most and least helpful professional development. *Arts Education Policy Review, 120*(2), 80-93. <https://doi.org/10.1080/10632913.2017.1328379>
- Bostic, T. J., Rubio, D. M., & Hood, M. (2000). A validation of the subjective vitality scale using structural equation modelling. *Social Indicators Research, 52*(3), 313-324. <https://doi.org/10.1023/A:1007136110218>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. <https://doi.org/10.1016/j.bbapap.2013.06.007>
- Darling-Hammond, L., Hyer, M.E., & Gardner, M. (2017). Effective teacher professional development, Learning Policy Institute, 1–8.
- Durksen, T. L., Klassen, R. M., & Daniels, L. M. (2017). Motivation and collaboration: The keys to a developmental framework for teachers' professional learning. *Teaching and Teacher Education, 67*, 53–66. <https://doi.org/10.1016/j.tate.2017.05.011>
- Fives, H., & Buehl, M. M. (2009). Examining the factor structure of the teachers' sense of efficacy scale. *The Journal of Experimental Education, 78*(1), 118-134.

<https://www.jstor.org/stable/27785555>

Fullan, M. (2020). *Leading in a culture of change* (2nd ed.). Jossey-Bass

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? *American Educational Research Journal*, 38(4), 915-945. <http://dx.doi.org/10.3102/00028312038004915>

Goroizidis, G., & Papaioannou, A. G. (2014). Teachers' motivation to participate in training and to implement innovations. *Teaching and Teacher Education*, 39, 1–11.

<https://doi.org/10.1016/j.tate.2013.12.001>

Guay, F. (2022). Applying self-determination theory to education: Regulations types, psychological needs, and autonomy supporting behaviours. *Canadian Journal of School Psychology*, 37(1), 75-92. <https://10.1177/08295735211055355>

Hargreaves, D. (1999). The knowledge-creating school. *British Journal of Educational Studies*, 47(2), 122–144. <https://doi.org/10.1111/1467-8527.00107>

Imants, J. & Van der Wal, M. M. (2020) A model of teacher agency in professional development and school reform, *Journal of Curriculum Studies*, 52(1), 1-14, DOI: 10.1080/00220272.2019.1604809

Kennedy, A. (2014). Models of continuing professional development: A framework for analysis *Professional Development in Education*, 40(3), 336–351. <https://doi.org/10.1080/19415257.2014.929293>

Klassen, R. M., Tze, V. M., Betts, S. M., & Gordon, K. A. (2011). Teacher efficacy research 1998–2009: Signs of progress or unfulfilled promise? *Educational Psychology Review*, 23(1), 21-43. <https://doi.org/10.1007/s10648-010-9141-8>

Lay, C. D., Allman, B., Cutri, R. M. & Kimmons, R. (2020) Examining a decade of research in

online teacher professional development. *Frontier in Education*, 5, 73-129.

<https://doi.org/10.3389/feduc.2020.573129>

Martin, T. S., & González, G. (2017). Teacher Perceptions About Value and Influence of Professional Development. 39th Annual Meeting of North the American Chapter of the International Group for the Psychology of Mathematics Education, 447–454.

<https://files.eric.ed.gov/fulltext/ED581328.pdf>

McKeown, D., Brindle, M., Harris, K. R., Sandmel, K., Steinbrecher, T. D., Graham, S., Lane, K. L., & Oakes, W. P. (2019). Teachers' voices: Perceptions of effective professional development and classwide implementation of self-regulated strategy development in writing. *American Educational Research Journal*, 56(3), 753–791.

<https://doi.org/10.3102/0002831218804146>

Morris, L. S., Grehl, M. M., Rutter, S. B., Mehta, M., & Westwater, M. L. (2022). On what motivates us: A detailed review of intrinsic vs. extrinsic motivation. *Psychological Medicine*, 52(10), 1801-1816. <https://doi.org/10.1017/S0033291722001611>

Mushayikwa, E. & Lubben, F. (2009). Self-directed professional development – hope for teachers working in deprived environments? *Teaching and Teacher Education*. 25, 375-382. <https://doi.org/10.1016/j.tate.2008.12.003>

Noonan, J. (2019). An affinity for learning: Teacher identity and powerful professional development. *Journal of Teacher Education*, 70(5) 526–537 DOI: 10.1177/0022487118788838

Penuel, W. R., Fishman, B. J., Yamaguchi, R., & Gallagher, L. P. (2007). What makes professional development effective? Strategies that foster curriculum implementation. *American Educational Research Journal*, 44(4), 921–958.

<https://doi.org/10.3102/0002831207308221>

- Power, K., & Goodnough, K. (2018). Fostering teachers' autonomous motivation during professional learning: A self-determination theory perspective. *Teaching Education, 30*(3), 1–21. <https://doi.org/10.1080/10476210.2018.1465035>
- Reeve, J. (2012). A self-determination theory perspective on student engagement. In S.L. Christenson, A.L. Reschly, & C. Wylie (Eds). *Handbook of Research on Student Engagement* (pp. 149-172). Springer. https://doi.org/10.1007/978-1-4614-2018-7_7
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology, 61*. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sancar, R., Atal, D., & Deryakulu (2021). A new framework for teachers' professional development. *Teaching and Teacher Education, 101*, <https://doi.org/10.1016/j.tate.2021.103305>
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and psychological measurement, 66*(4), 701-716. <http://dx.doi.org/10.1177/0013164405282471>
- Slemp, G. R., Kern, M. L., Patrick, K. J., & Ryan, R. M. (2018). Leader autonomy support in the workplace: A meta-analytic review. *Motivation and Emotion, 42*(5), 706–724. <https://doi.org/10.1007/s11031-018-9698-y>
- Smith, M. C., & Reynolds, K. J. (2014). Teachers know best: Teachers' views on professional development. *Bill and Melinda Gates Foundation*, 1–20.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805. <https://doi.org/10.1016/S0742->

051X(01)00036-1

Van den Broeck, A., Vansteenkiste, M., De Witte, H., Soenens, B., & Lens, W. (2010).

Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. *Journal of Occupational and Organizational Psychology*, 83(4), 981-1002.

<https://doi.org/10.1348/096317909X481382>

Wei, R. C., Darling-Hammond, L., and Adamson, F. (2010). *Professional development in the United States: Trends and challenges*. National Staff Development Council.

Table 1: Participant Information

	n	%
Gender		
Male	3	11.1%
Female	24	88.9%
Age Range		
20-24	7	26%
25-29	5	19%
35-39	12	44%
45-49	3	11%
Race/Ethnicity		
Anglo-American	26	96.3%
Hispanic	1	3.7%
Highest level of education		
Bachelor's Degree	4	14.8%
Master's Degree	8	29.6%
Master's Degree +	15	55.6%
Grade Level Teaching		
Elementary (PreK-3)	8	39.6%
Elementary (4-5)	4	14.8%
Middle (6-8)	2	7.4%
High (9-12)	13	48.1%

Table 2: Descriptive Statistics and Correlation Matrix

	Min	Max	M	SD	α	1	2	3	4	5
1. Autonomy Support	2.83	4.83	4.06	.45	.90	1	.156	.223	-.111	.307
2. Engagement	2.22	6.22	4.55	1.08	.93		1	.156	.479*	.038
3. Teacher Sense of Efficacy	5.08	6.75	5.85	.46	.75			1	.325	.373*
4. Vitality	3.00	6.33	5.02	.88	.85				1	.249
5. Need Satisfaction	4.61	6.94	5.97	.57	A: .69 C: .80 R: .92					1

*Correlation is significant at the 0.05 level (2-tailed).