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A Novel Learning Experience: I-DREAM Internship Embedded in a STEM Academy

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Scholarly Essay
To start this scholarly essay, two things must be noted: 1) this novel internship would not have occurred without the support of the I-DREAM grant, and 2) this novel internship was created as a matter of expediency. The lessons learned were not recognized until a conversation late in the internship prompted deep reflection on the part of the mentor. This led to a later, much longer conversation between mentor and intern (first and second author, respectively) which shed light on the true depth of the lessons learned, because the intern was now in the midst of student teaching. From these conversations, this scholarly essay was crafted with an idea that has the potential to make a noticeable difference in how preservice teachers are prepared for the classroom.

The Problem
For decades, a gap has existed in the experiential training of undergraduate teacher candidates in traditional teacher education programs. Unfortunately, research often focuses heavily on urban and suburban schools, paying little attention to how this gap plays out in rural settings, and current research indicates that this problem may have an outsized effect on rural schools, especially those in high-poverty areas (Ingersoll & Tran, 2023). This gap is a large source of fear for those entering student teaching (Kelly, 2000; Murwin & Matt, 1990; Ozmantar, 2019; Shoyer & Leshem, 2016) and leads to many new teachers leaving the profession as they fail to master this skill in their first few years (Tompkins, 2023). If you, dear reader, have not already guessed, the gap is

in classroom management training. Many preservice teachers receive some instruction on this in their teacher preparation programs, but little actual experiential development, leaving a large gap in their classroom management skills. Most people understand that this skill will make or break you as a teacher, and that reality is played out every time a new teacher walks out their classroom door and makes the decision to find a different job where they are treated with respect and can do their job without having to argue with anyone.

The Context

Fear is a tremendous motivator and demotivator. The fears that preservice teachers have prior to student teaching greatly impact their success during this crucial teaching internship (Ozmantar, 2019; Shoyer & Leshem, 2016; Tompkins, 2023) and can have long-term effects on their career if those fears are not laid to rest (Tompkins, 2023). One of the biggest fears most preservice teachers have, is being unable to discipline students (Kelly, 2000; Murwin & Matt, 1990) or in the current vernacular, manage a classroom (Ozmantar, 2019; Shoyer & Leshem, 2016). This is a make-or-break skill for teacher effectiveness (Roberson, 2014; Tompkins, 2023) and preservice teachers know it. This fear is also a consistent one held by preservice teachers from early childhood to secondary, being found in studies of preservice teacher fears for the past 35 years (Kelly, 2000; Murwin & Matt, 1990; Ozmantar, 2019; Shoyer & Leshem, 2016).

To address this fear, rural teacher education programs require multiple semesters of Field Observation or Field Experience courses (Field O/E; 40-75 hours/semester), and have used this approach for many years. Field O/E hours provide preservice teachers numerous opportunities to see the information they are learning play out in different local classrooms over time (Sunal, 1980). During Field O/E, preservice teachers are placed in local P-12 classrooms to observe teachers as they interact with their students. Preservice teachers are generally prompted to interact with students while out in their Field O/E, but this interaction may or may not occur. Having been a preservice teacher, classroom mentor teacher, and university supervisor, the first author can attest that this lack of classroom interaction is sometimes due to cooperating teachers not allowing preservice teachers to interact with their students, and sometimes due to preservice teacher not taking the initiative; in both instances, the preservice teacher often finishes their Field O/E hours for the semester having gained very little. For years, teacher prep programs also have provided theoretical content instruction on classroom management and methods courses which engage preservice teachers in class projects that focus on individual P-12 students (Sunal, 1980). While these varied interventions provide a degree of preparation, they generally are *knowledge*-based and fall short of developing pre-service teachers' *skills* in classroom management. It is one thing to talk about and make plans for managing a classroom, but it is completely different when faced with a roomful of students.

P-12 classrooms are dynamic environments composed of up to 40 students, each with individual needs, each vying for the teacher's attention while also weighing the attention they receive against the attention paid to others in the room. This social aspect of teaching is arguably the most difficult thing to learn in classroom management, and the least addressed in teacher preparation programs (Roberson, 2014). If it were only about managing students, one could argue that almost all student teachers would be able to figure it out in the first month, but the dynamic classroom

environment includes many other things that vie for the student teacher's attention, such as interruptions from the intercom, cell phones, and visitors at the door, problems with the instructional technology, taking roll, finding lost pencils, helping the student who just came back from being absent for a week catch up, and completing disciplinary reports for the fight that erupted when class started – all while trying to get through the new content for the lesson before the bell rings. This goes on all day long, five days a week, for 180 days – and this does not even account for grading, extra duties, and substituting for your neighbor down the hall during your planning period. Classroom management skills can take the potential for chaos in any classroom and turn it into a productive day for all involved.

Classroom management is an extension of legitimate teacher authority; teachers who hold legitimate authority have well-managed classrooms as evidenced by widespread academic and social cooperation from students both in and out of the classroom, but the process for developing legitimate authority is generally not taught in rural teacher preparation programs (Roberson, 2014). This is likely due to the Council for the Accreditation of Educator Preparation (CAEP) Standards not specifically listing classroom management skills or authority development in their standards for teacher preparation programs (CAEP, 2025); the likely assumption, as noted earlier, is that preservice teachers will take what they learn in the teacher preparation program and use it to develop these skills while student teaching (Roberson, 2014). For some, this works, having been born with an innate talent for managing students or being placed under the tutelage of an excellent mentor teacher (or both), while others never develop this skill and leave the profession early (Tompkins, 2023). How to help this second group is a perennial question in the field of education, especially given the constant attrition rate (Tompkins, 2023).

A few teacher preparation programs explicitly teach classroom management in the form of a course, but most programs expect their teacher candidates to develop classroom management skills during student teaching. New student teachers are expected to take the information they learned during their program and "figure out" how to manage a class with the help of their mentor teacher, assuming the mentor teacher is a good classroom manager *and* also aware enough of their own process that they can explain how they manage successfully (Roberson, 2014). As noted, this works for some, but certainly not for everyone. For those who do not figure out classroom management during student teaching, the hope is they will do so during their first year of teaching, but the persistent teacher attrition rate argues differently (Tompkins, 2023). Classroom management is certainly not the only difficulty that leads to the decision to leave the profession, but it is highly salient since it tends to elicit strong emotions on a relatively continuous basis (Chang, 2009). A lack of classroom management is often the start of a chain of events that leads a new teacher to discover many of the other difficulties that result in the decision to leave, such as a lack of support from administration, being in conflict with administration, parental interference, parental lack of involvement, and poor school climate (Tompkins, 2023).

The end of your degree program is a dreadful time to discover that your biggest fear – being a terrible classroom manager – has come to fruition. Many a newly minted teacher, the first author included, has left the profession upon graduation because the fear that they could not manage students well enough to teach effectively was confirmed during their internship. Fortunately for

the first author, ten years of maturation and parenting made all the difference, but teacher preparation programs cannot expect students to become parents, nor wait for maturation to occur, to help their preservice teachers develop classroom management skills. So, the question begs asking:

> *What can teacher preparation programs do to better provide classroom management experiences for preservice teachers prior to student teaching?*

In this scholarly essay, a novel internship approach to experiential learning in classroom management for preservice teachers will be discussed, using the theoretical frameworks of Self-Determination Theory and Experiential Learning Theory.

Self Determination Theory (SDT) is a meta-theory of motivation that combines intrinsic/extrinsic motivation, self-regulation, and locus of causality (i.e., locus of control) to explain how humans are motivated to do almost everything in life (Ryan & Deci, 2000). A Google Scholar search at the time of this writing identified 6,310,000 published scholarly sources, using SDT, which cover everything from work-related motivation to exercise and healthy behavior, to student engagement; SDT has also been used in studies across the globe, including rural areas, with people of all ages, so it is well-studied and validated in many contexts. SDT describes the process whereby humans are able to transition along a continuum from amotivation through fully intrinsic motivation when their three basic organismic needs are met; those needs being competence, autonomy, and relatedness (Ryan & Deci, 2000). Competence is a need for both the ability to do something well and the knowledge that you can do it well, which supports the need for autonomy, the knowledge that you are independent and in control of things in your life (Ryan & Deci, 2000). Relatedness is seen as both the connection felt between humans (Ryan & Deci, 2000) and relevance for a particular task (Vansteenkiste et al., 2018).

These organismic needs that lead to being an intrinsically motivated teacher map well onto student teaching, as evidenced by their hopes and fears. All student teachers hope they will succeed at student teaching and become effective teachers, and their fears are the darker side of this coin. All student teachers fear they do not know their content well enough, which is a need for both competence and relatedness (relevance). Their other major fear is not figuring out how to be “in charge” and manage students well, which is all three needs – autonomy, competence, and relatedness (connection). These two major fears feed their greatest fear of being an ineffective teacher, or worse, not becoming a teacher at all.

Experiential Learning Theory actually encompasses several related theories, all of which focus on how humans learn by doing. Internships are considered both experiential learning and a high impact practice (Daday et al., 2025; Davis & Petit, 2025) which are important to preservice teacher development (Zembylas & Barker, 2002). This scholarly essay will focus on Kolb’s Experiential Learning Theory and Chan’s Chain of Mirrors Metacognitive Development Model; Kolb’s theory was chosen for its six principles of learning, while Chan’s model was chosen for its focus on the metacognitive processes inherent to reflective improvement (Chan, 2022). According to Chan (2022), Kolb’s six principles describe the criteria which must be understood and met for an experience to become experiential learning, including: experiential learning is a *process* (principle 1) that is *iterative* (2), it is *fully immersed* in a context *(4)* and *engaged* in said context (5), and

within this context, *learners reflect* on their learning (3) to *construct* new knowledge (6). Kolb does not note this in the six principles, but this author (and apparently teacher preparation programs across the nation) also expect to see improved skills competency from experiential learning. Chan's (2022) theory expands on Kolb's principles of *Emotional Reflection* and *Constructivism*, to describe the metacognitive thoughts and emotions threaded through the experiential learning process. Chan's (2022) model includes the following specific aspects of reflection and construction:

1. Rationale/Motive – Why should I engage in this experience?
2. Self-awareness – What do I already know related to this experience?
3. Expectation – What do I expect to gain from this experience?
4. Experience – What did I do, and what contribution did I make in this experience?
5. Learning – What did I learn from this experience?
6. Appraisal/feedback – Realistically, how did I do in this experience – from my perspective and other's perspectives?
7. Reflection – How do I feel about this experience? What will I change the next time I do this?

Like Self Determination Theory, both Experiential Learning models map well onto the student teaching semester in CAEP accredited programs (2025); student teaching definitely hits all six of Kolb's criteria and all seven of Chan's reflections. All student teachers are assigned a reflection process that includes self-reflecting in writing on multiple areas of responsibility, and verbally reflecting with their mentor teacher and university supervisor after working with students. This reflective process helps these interns identify problems and figure out how to improve the situation, so they can be a better teacher the next day.

An Unexpected Internship

Early in the summer of 2025, two grant project managers stopped in the hallway to discuss problems they were having in meeting a couple of their project goals. The I-DREAM grant manager needed to send an intern for professional development and the Human Water Cycle/EdPASS-H2O grant manager (first author, project director, and intern mentor) needed a student worker for her summer STEM academies. To address the needs of both programs, the I-DREAM grant manager suggested providing a preservice teacher intern to help with the upcoming Human Water Cycle Academies that the other project manager was running. Both agreed that it could serve as professional development for the preservice teacher. The HWC grant manager noted that a preservice *science* teacher was preferable since it was a STEM academy, but at this point any intern would do. An agreement was reached and the I-DREAM Program posted a job opening for a paid summer internship with the Human Water Cycle Academies.

Sean, our preservice history teacher protagonist, saw the I-DREAM job and applied for the HWC preservice teacher internship. Sean saw this as an opportunity "to get the money to make it through student teaching" in the fall; he would not be able to work during that time, so money would be tight. Besides the money, the internship sounded interesting because he would be working with 8-12 grade students – the age group he planned to work with as a future history teacher. Sean liked science but as a history major, he was no science expert, so that was one of

his concerns when he applied. Interestingly, Sean took a class with the HWC grant manager the year before but was unaware she would be the HWC intern mentor when he submitted his application. Sean was the only preservice teacher to apply, so he was hired as the HWC's first preservice teacher intern and worked at two of the three summer 2025 academies.

When Sean applied for the HWC academy intern position, he had little in the way of expectations. "Honestly I wasn't [expecting anything] I was like, I don't really have an expectation to learn anything going into it." Sean followed this with, "I was expecting to just kind of be more of a go, run and get this for me or, you know, a gopher."

Within 10 minutes of arriving at the first Human Water Cycle Academy site, the director, Sean's mentor, told him he would not be a "gopher" but would be working with her as she managed and supported students all day. This surprised Sean, "I wasn't expecting as much to actually be assisting with managing students." The HWC Academy had four regular staff members (i.e., director, two content expert teachers, STEM student worker) and Sean would work with the director to manage and support students in all activities over the four days of the Academy, including field trips, extensive lab activities, classroom activities, breaks, and meals. Since Sean did not know the schedule for the day, he simply tried to learn the names of the 19 students at that academy and do whatever was asked of him. That morning the students walked to a local pond to collect water samples and then tested their samples back at the lab. Sean went on his first field trip as a chaperone and then helped students figure out the complicated instructions for a chemical test kit that he had never seen before. Sean did a great job of modeling productive struggle for the students he worked with; he was quite honest telling them he did not know how to use the kit either, but reading the directions was a good place to start.

At lunch, Sean and the mentor discussed how things were going so far, and he focused on events he thought could have gone better. Sean was concerned that he did not know enough science to help the students. The mentor said to not worry about the science and just focus on 1) managing behavior and 2) supporting students through the academic struggles they felt during the labs. Sean and the mentor also discussed a couple of other concerns he had from the morning, and this processing helped him modify his approach with students in the afternoon.

Once the camp was over for the day, Sean went to dinner with his mentor and the other HWC staff members. During this time, Sean and his mentor discussed how the afternoon lab and activities went. Sean had learned most of the students' names, and using what his education professors had taught him, identified several students with exceptionalities (i.e., ADHD, ASD, attachment disorder, gifted, Type 1 diabetes); so, they discussed how to academically and socially support this diversity of students during the camp. The next order of business was the romance that flared up during lunch between two of the students (i.e., 8th and 10th grade). Sean was shocked at how swiftly this happened; "I did not realize that four days is enough time to have a full Hallmark movie." This became one of Sean's jobs – to help his mentor keep tabs on these two students, especially during unstructured times like breaks and lunch. Sean and his mentor also discussed what the next day would hold (i.e., field trip #2 and a complex 3-part lab) and how he fit into the activities. This reflective dynamic of 1) work with students, 2) eat and process, 3)

work with students, 4) eat and process, was repeated each of the four days of the academy – for both academies.

The second academy, held the next week, was at a different campus with different students. This group of 15 was predominantly lower SES but otherwise similar in profile with the exception of a gender questioning student. Sean identified one student as struggling more than the others, so part of his time was spent supporting this student. In our final discussion, Sean said he found the second camp to be much less stressful than the first, simply because he was not "trying to figure out…what's happening at the same time the kids were." The meal discussions for the second camp were still very reflective of his interactions with the students, but now Sean was also taking what he learned with the first camp, comparing it with what he was currently learning, and using it to improve his management skills.

Interview Results with Analysis

Two weeks into student teaching, Sean agreed to do an interview with his internship mentor (i.e., first author) over his summer internship experience. The intent was to see if the internship experience had affected his student teaching experience in any way, and if so, how. Several items of interest came to the surface during the interview, the first of which was how this internship helped allay his fears. The internship "was a lot more beneficial than I was expecting…when I was going into it [pause] it really did help. It actually helped me get some of the confidence…and the jitters I was having about student teaching and teaching in general out of my system." Following are the pertinent questions listed in order from the interview, with Sean's answers followed by a short discussion.

Question 1: What did you learn about teaching during your internship?

Sean's Answer:

> I learned how to encourage students even when they got the wrong answer. How to kind of guide them towards the right answer instead of just being like, 'No, that's not it. Let's try to find the right one.' [pause] This especially helped me understand kind of how to navigate when a student's having a bad day, how to make sure that they still learn when they're not having a good day. I've actually…yeah…some of the stuff from that [experience] I've already had to use with student teaching.

Analysis: This response immediately followed Sean's comment about his "jitters", so addressing student struggles as a teacher was likely an area of concern for him. From the reflective time spent with Sean during the academy, this was definitely a point of discussion on more than one occasion – how to help a student when they got lost in the instructions or wanted to quit. According to the literature, fear of how to support students, whether academically, emotionally, or socially, are common areas of concern for preservice teachers (Kelly, 2000; Murwin & Matt, 1990; Ozmantar, 2019; Shoyer & Leshem, 2016).

Question 2: What did you learn about students during this time?

Sean's Answer:

> Going through school they tell you connect with the students' interests, and it will help them stay motivated…but actually seeing how it works with the students [at the academy], it helped me understand. 'Okay, I can do this and it helps them connect the dots a little bit easier.' [pause] … it really does prove beneficial.

Analysis: Sean is correct that teacher preparation programs commonly provide instruction on student motivation and how to improve it during instruction, commonly using the mantra, "know your students." Motivation was a regular topic of discussion during the Academy and being able to reflect on it helped Sean better apply what he learned in his program with his experiential learning in the Academy (Chan, 2022; Daday et al., 2025; Davis & Petit, 2025). This is also something preservice teachers should be looking for during their Field O/E. Unfortunately, it is not often very salient for them since eliciting student interest is embedded in a complex learning context. Most preservice teachers would not realize that Ms. Smith quickly integrated one of Bobby's favorite topics into the lesson because his attention was waning, and that by doing this, Ms. Smith helped Bobby make a connection that assisted in his understanding. This pulled him back into the lesson and prevented his off-task behavior from spreading to other students. Holding a reflective conversation after Field O/E helps the preservice teacher process and make sense of what they experienced (Chan, 2022)

Question 3: What did you learn about classroom management?

Sean's Answer:

> I definitely learned. Actually, I learned a lot with classroom management through the internships because as secondary major, we don't have a lot of those classes [on] how to manage the class so that was one of…my biggest worries going into student teaching…I didn't feel prepared to properly manage a classroom so I learned [pause] I learned how to space students out and how to pace differently just depending on how they're feeling…

When asked the follow-up question, "Did being prepared help any?", Sean responded:

> Yes, it's helped a lot. It yeah, it's helped a lot through this…One of the big things I've come across with student teaching is…I might print off a document or two for them to read and [say], 'We'll come back and talk about it,' and they go, 'What?' I was like, 'Yeah.' I'll talk about the book I'm reading and they're like, 'You actually read?" and I'm just like, "[You] do you not?"

Analysis: Sean discovered several items of importance that new student teachers hopefully learn when first managing students: space per student, lesson pacing, and expectations. Sean interned at two academies held at different campuses. One Academy had ample lab and classroom space but limited space for downtime (lunch and breaks for 19 students in a conference room meant for 12). The other Academy had limited lab space for 15 students, but a reasonable space for class time and downtime. From these two camps, Sean came to realize that students are more irritable when they work closer to each other, and this leads to an increase in behavioral issues; working with the students all day allowed him the chance to see the antecedents that led to poor student behavior. Additionally, at the first Academy, most of the students struggled to follow the

instructions in the lab manual, despite having illustrations and instructors walking them through the instructions. Those who could read on their own finished ahead of the rest and became bored or distracted, while those who struggled became frustrated, with both instances resulting in off-task behavior. Recognizing the poor instructional pacing, the staff created a digital slide show for the next Academy, thus improving the instructional pacing. Lastly, Sean was very surprised to discover that most of these college-bound students were *not readers*. This was an important realization for him since he plans to be a history teacher and expects his students to read. As noted in the interview, he was also surprised that the students he was working with *while student teaching* were not readers, so perhaps he thought the lack of reading was simply a summertime trend, and not as widespread as it appears to be among adolescent students. From the reflective discussions engaged in each day of the internship (Chan, 2022; Daday et al., 2025; Davis & Petit, 2025), Sean discovered how different aspects of classroom management can work together to either improve or degrade the learning environment. This was a good thing to discover before student teaching, so he could enter that internship with open eyes and ideas for how to address each problem area when he encountered it (Zembylas & Barker, 2002).

Question 4: What stood out the most from your experience at the two camps?

Sean's Answer:

> With the [first] one, I didn't realize…relationships in general, how quickly those can form between people… children that just met, right? I did not realize that four days is enough time to have a full Hallmark movie. At [the second] I guess…what stood out for me is how rejected some gifted kids feel, because there [were] a lot of the kids…that they really were gift, like intelligent, but you could tell that they just felt like they weren't. They had been told they weren't and stuff.

Analysis: Both of Sean's observations are common preservice teacher fears which center on students (Ozmantar, 2019). His first observation is a fear that most student teachers in middle school to high school will face. No amount of teacher preparation classes can begin to prepare student teachers for the reality of a torrid love affair in junior high – not especially between emotionally and socially immature students, as the two in this Academy were. Sean's second observation also fits in well as a teacher fear, that of feeling unprepared to manage students of differing academic abilities. Teacher preparation coursework tends to focus on students functioning at the lower end of the academic spectrum for valid reasons, but high-functioning students also have their struggles, especially if they come from low SES households where their intellectual needs are less likely to be met (Berk, 2012). Reflecting on these situations at the end of each day helped Sean come to grips with the reality, understand the nuances, and prepare for the next day (Chan, 2022; Zembylas & Barker, 2002).

Question 5: Did this internship prepare you in any way for student teaching? Explain.

Sean's Answer:

> It prepared me in a lot of ways…Time management… especially having students for a very extended period of time because [the school he is student teaching in] is on a block schedule, so they have hour and a half periods. So, I was not ready for that except with what we did this summer, because we had those kids all day,

> so it kind of helped me understand how to play with the highs and lows of [classroom] energy.

Analysis: In general, we as humans expect everyone else to have similar experiences to our own; if we come from a happy, two-parent household, we expect everyone else has as well. This is a huge misunderstanding that produces much emotional work for those entering the field of education, especially in low-SES and rural schools, and can lead to burnout (Chang, 2009; Ingersoll & Tran, 2023; Tompkins, 2023). This reality check is one of the main reasons for Field O/E. It gives preservice teachers the opportunity to see the gamut of diversity among students, as well as how teaching and learning work as they observe different teachers, classrooms, and schools. With that said, block schedules are not common in small rural schools in Oklahoma, which is likely why Sean had not considered the pacing needed for this type of schedule. It is also something he never learned about in his teacher preparation program. Time management is an extremely important skill for every teacher and something that many find difficult to master. Fortunately for Sean, the HWC Academy was structured much more like a block schedule, rather than the 45-50-minute periods that small schools tend to use and provided him with the experience he needed to quickly adapt to this new schedule. Sean's comment about "energy" is noteworthy, because understanding the ebb and flow of student activity and focus (i.e., energy) in the classroom, and how it changes over time, is necessary to managing students and something else that takes time to understand. While working on a block schedule was never a topic of discussion in the reflective dinnertime sessions, Sean's internship experience helped him make sense of his current student teaching experience.

At the end of the interview, when asked if he would recommend this type of internship to other teacher certification students, Sean gave an emphatic, "Absolutely!" He followed with, "I really would, whether or not they are wanting to do science because even with me doing history, this has helped…I'm not even doing the same age group that we had [HWC mostly grades 8-9, student teaching grades 11-12], so yeah, I really think that it's something that…people trying to be teachers should do. This was an amazing thing and I'm glad I got to do it!"

Discussion

Sean's comment about preservice teachers interning at a science academy, "whether or not they are wanting to do science" was the main impetus for this essay. When Sean made that statement, it sparked an idea that this author believes could engender the development of classroom management skills in preservice teachers *before* they start student teaching, which brings us back to our question: W*hat can teacher preparation programs do to better provide classroom management experiences for preservice teachers prior to student teaching?*

Self Determination Theory tells us that for anyone to be in charge of their own life, their organismal needs of *competency, autonomy, and relatedness* need to be met; meaning they need to connect with people, connect with what they do, and be good at both (Ryan & Deci, 2000; Vansteenkiste et al., 2018). Most who go into teaching do so because they connect with either teaching or students (i.e., relatedness), so the first need is met, but they still need to develop their content knowledge, pedagogy, and management skills (i.e., competency), so they can teach effectively

(i.e., autonomy); this is where teacher preparation programs come in. In their coursework, preservice teachers are taught the content necessary to be good teachers, and their Field O/E classes allow them a window into the classroom so they can see the content in action. Unfortunately, in Field O/E, preservice teachers generally take the role of outside observers who interact minimally with students, while student teachers are expected to apply this knowledge in the form of skills to almost *all* the teacher tasks in a few weeks' time. This dynamic poorly supports the development of competency and autonomy (Ryan & Deci, 2000; Vansteenkiste et al., 2018) in the management of students, which is the area of greatest fear for incoming student teachers (Kelly, 2000; Murwin & Matt, 1990, Ozmantar, 2019; Sunal, 1980) because they know that classroom management is the skill that ensures either success or failure for them. The Human Water Cycle Academy Internship found a middle ground that allows for guided development in classroom management.

As an intern, Sean provided social and academic support to students *outside of his content area.* This juxtaposition of managing (i.e., social and academic support) but *not* teaching is important since student teaching and most experiential learning/informal learning internships for preservice teachers have them multitasking by teaching content while managing students (Arslan, 2024; Newman et al., 2009; Richards, 2007). In this Academy, Sean knew he would not teach, so he focused on connecting with the students and learned to better manage them by daily reflecting on his experiences with his mentor (Chan, 2022). This allowed him enough time and experience to make connections, develop competency, and grow into a semi-autonomous classroom manager before he entered student teaching (Ryan & Deci, 2000; Vansteenkiste et al., 2018).

Also of importance, the HWC Academy internship was an informal context that provided a low-stakes setting for both Sean and the students since no grades or test scores were on the line. This is a major distinction since student test scores are always a worry when student teachers are engaged in their internships and student teachers are also earning a grade for their performance; additionally, most other informal preservice teacher internships in the literature tie preservice teacher performance to a grade (Arslan, 2024; Newman et al., 2009; Richards, 2007). The low-stakes setting provided a safe space for the development of teacher-student relationships, which gave Sean the opportunity to help students as they academically struggled, further developing his budding pedagogical and management skills. Learning how to manage students before you are called upon to split your attention between teaching content and managing students may minimize much of the struggle that all student teachers experience – the same struggle that convinces some of them to leave the profession before they ever really embark on their teaching journey (Chang, 2009; Ingersoll & Tran, 2023; Tompkins, 2023).

Implications

Providing low-stakes opportunities for preservice teachers to manage small groups of students *without teaching at the same time*, such as in afterschool programs, day camps, and STEM academies, can be a game changer for preservice teacher skill development. One of the first things that most mentor teachers and university supervisors note on their observation forms for student teacher is the need to pay attention to and manage student behavior while also teaching the lesson, apparently not remembering that humans can only pay attention to one thing at a time

when there is a great deal of cognitive load involved (Eggen & Kauchak, 2012). This limitation of working memory is taught in Educational Psychology classes as something to be aware of in P12 students, but it applies to everyone. It most especially applies to student teachers whose working memories are adversely affected by their worry about the lesson they are currently teaching. Allowing preservice teachers, the opportunity to *regularly manage* groups of students and *reflect* on those experiences, prior to student teaching, will develop their skills, fulfill their self-determined needs for relatedness and competence (which leads to autonomy), and set them on the path to success. This opportunity will also provide both preservice teachers and their mentors with insights that helps with decision-making before those preservice teachers start student teaching.

Conclusion

The current teaching shortage is due to both a lack of teachers going into the field and attrition, and is more pronounced in rural schools given the setting and demographics, so anything we can do to better prepare preservice teachers prior to entering the field will help with both areas of shortage. Student teachers who are better prepared for *classroom management* should be: 1) more successful in student teaching, 2) more likely to join the ranks of serving teachers once their internship is complete, and 3) more likely to stay in the profession for the long term because they enjoy teaching. Developing and keeping *effective* teachers, especially in rural schools where teachers are positive role models for their students and the school is the lifeblood of the community, should be a top priority for every teacher preparation program. The idea of a classroom management internship is something that should be considered.

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- The ***I-DREAM Program*** (Innovation & Development through Resources, Education, Access, and Mentorship) is funded through a federal Hawkins grant and is housed at East Central University. This program provides wide-spread support for both preservice and current teachers. One area of support, pivotal to this discussion, is providing preservice teachers with extra-curricular experiential learning in the form of paid professional development and summer internships.

- The ***EdPASS-H2O Program*** (Educational Program on Awareness, Sustainability, and Service in Water/Wastewater; 84034501) is funded through an EPA workforce grant and housed at East Central University. EdPASS-H2O provides education and resources to public schools and the public in general on the human water cycle, the water and wastewater industry, and specifically careers in that industry.

- The ***Human Water Cycle Academy*** is funded through an Oklahoma State Regents for Higher Education grant and is also housed at East Central University. This STEM academy works directly with the EdPASS-H2O program to provide 4-day commuter camps for students in

grades 8-12 in the summer. This academy engages students in STEM activities which mirror the lab science conducted daily at water and wastewater facilities across the world.

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