

Designing Motivationally Enhanced Asynchronous Online Academy for In-service Teachers Using the ARCS Motivational Design Model

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Teachers recognize the importance of professional development (PD) but often struggle with low motivation and provide negative feedback. While studies highlight the need for teacher PD, there is insufficient discussion on what makes PD engaging. In this paper, we present a design case of a motivationally enhanced asynchronous PD session for in-service teachers using the ARCS motivational design model. To illustrate the motivational design process of a PD program for in-service teachers, we discussed examples of motivational interventions and strategies. Then we showcased the ARCS-based motivational design process using the 10 steps of systematic design approach. The design case will be beneficial for instructional designers who are involved in creating an engaging PD for teachers.

Keywords: Professional development, ARCS motivational design, Asynchronous course, In-service teacher training

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Introduction

Teachers are the backbone of the American education system and are often required to participate in a series of professional development (PD) for ongoing improvement of their curriculum design, teaching, and class management skills and knowledge. However, despite the importance of PD, teachers often struggle with low motivation and less than positive feedback (Appova & Arbaugh, 2017). While existing studies address an increasing need for teacher PD (Hills, 2009), there has not been sufficient discussion on what engaging PD means and how it should be designed (Sancar, Atal, & Deryakulu, 2021).

Teachers encounter various motivational problems that can hinder their active participation in PD. One common issue is the struggle to see a clear connection between the training material or strategies provided and their actual classroom practices (Fairman et al., 2023). For example, teachers are not engaged when attending training sessions that feel generic or out-of-date, failing to address the specific hurdles that teachers currently face in the classroom. Also, PD training, which does not provide necessary information for teachers' day-to-day teaching duties and workload, diminishes the value of PD. The PD training makes teachers question whether their time and energy would be better spent on other equally important responsibilities, like maintaining discipline in the classroom, grading assignments, communicating with parents, and meeting and reporting to administrators. Indeed, teachers' motivation for PD has been regarded as an important factor in deciding whether to participate in PD or not (Kwakman, 2003; Sprott, 2019).

With these very real motivational challenges in mind, this paper seeks to present a case of the motivational design of a PD for in-service teachers. First, we reviewed the underlying causes and consequences of teachers' lack of motivation in PD settings. Then, we drew on established motivational theories to identify the necessary changes and interventions that would effectively address motivational issues. We specifically applied the ARCS motivational design framework to produce motivational tactics related to teachers' attention, perceived relevance, felt confidence, and satisfaction (Keller, 2010). The proposed solution involves the thoughtful creation of an online academy that is specifically designed to support teachers in how to utilize literacy tools effectively. Through this approach, we aim to foster teacher engagement with the course content, increase perceived relevance, and lead to improved outcomes for those who complete the asynchronous courses. Our approach contextualizes the struggles faced by teachers and addresses the motivational hurdles that they may face while completing the online academy PD training. The goal of the motivational design was to contribute to the overall enhancement of PD programs and, ultimately, the motivational quality of education in schools.

Motivational Issues in PD

When training incorporates motivational interventions rooted in the ARCS framework, the outcomes lead to a transformative learning experience for educators (Beahm & Bradshaw, 2023). One of the prominent motivational problems teachers face in completing PD is the lack of perceived relevance (Fairman et al., 2023). According to Keller (2010), relevance is one of the motivational concepts within the ARCS framework. When educators do not see the direct correlation between the content or methods being taught and their day-to-day teaching responsibilities, their motivation to engage in PD decreases. Another motivational problem is the limited autonomy and choice provided to teachers while selecting PD opportunities, which also diminishes the factors of relevance based on the ARCS framework. When educators are not given the freedom to choose topics aligned with their individual needs or interests, they may perceive PD as a top-down imposed task rather than a personal growth opportunity. This lack of autonomy and choice can reduce teachers' intrinsic motivation and further their engagement and commitment to the learning opportunities. When teachers feel that their preferences and professional goals are not considered and that they are instead mandated to complete PD, their motivation to actively participate in these activities decreases significantly.

The consequences of these motivational problems can be far-reaching and make an engaging training course irrelevant. When teachers perceive PD as unnecessary or do not trust the trainer, they may disengage from the learning process, leading to a lack of knowledge and skills necessary for effective and improved teaching practices. This is especially true when a new tool is in the process of being implemented at the school, but there is no buy-in from teachers. Ultimately, it negatively impacts student outcomes and causes these implementations to not go as planned. The perceived autonomy and competence help stimulate teachers' intrinsic motivation (Groot-Reuvekamp, Ros, & Boxtel, 2018). The limited autonomy and choice in PD can result in feelings of frustration and disempowerment among teachers. This leads to decreased job satisfaction and even burnout, further compromising teachers' overall performance and personal growth. To address these motivational problems and ensure the tactics are successful when designing PD training, it is essential to make PD activities very relevant and meaningful to teachers. This can be achieved by tailoring the content and methods of training modules to address specific challenges faced by educators in their daily teaching responsibilities. When training incorporates real-world examples and scenarios, ARCS strategies to increase motivation, and innovative learning experiences, teachers can better connect the PD

activities to their classroom practices and are expected to actively participate and make the most out of growth and development opportunities.

Teachers' motivation for PD also depends on their individual characteristics (Richter, Kleinknecht, & Gröschner, 2019). Learning goal-oriented learners in an organization tend to seek challenging tasks, focus more on task mastery, and believe in the power of effort (Ma, Peng, & Wu, 2019). When teachers take the role of learners, providing them with more autonomy and choice in selecting PD opportunities is crucial, as well as providing personalized paths of course completion and taking into consideration whether they are learning goal-oriented learners. By allowing educators to identify their individual needs and interests and also offering a variety of PD options aligned with these preferences, intrinsic motivation can be improved. Teachers are empowered to take ownership of their professional growth, leading to increased engagement and commitment. For these reasons, identifying and addressing motivational problems in completing PD is essential for ensuring the effectiveness of PD activities. Recognizing the lack of perceived relevance and limited autonomy and choice as potential barriers, PD trainers can implement changes that better teacher motivation, engagement, and professional growth. Targeted modifications to training content and methods and promoting autonomy and choices allow trainers to create a supportive and motivating environment that encourages teachers to participate in PD actively, benefiting both educators and students.

Motivational Theories and Models for PD

Previous studies reported key characteristics of motivated teachers. Louws et al. (2017) investigated teachers' self-directed learning preferences and explored how they are influenced by teaching experience. The study surveyed teachers from 11 Dutch secondary schools, collecting data on their preferred learning domains, activities, and reasons for learning and developing professionally. The findings illuminated teachers' motivational outcomes in relation to their experience levels and how long they had been teaching. Early and late-career teachers showed a stronger inclination to learn about classroom management and learning climate compared to mid-career teachers. This can be attributed to the desire of late-career teachers to establish rapport and mutual respect with the younger generation, as evidenced by previous research. On the other hand, early-career teachers demonstrated an interest in mastering various aspects of classroom teaching, including organizational skills. The study also revealed that early-career teachers showed a greater preference for experimental learning methods, while the inclination towards training and staying updated through PD remained consistent across all experience levels. Teachers' motivations for selecting specific learning domains were primarily motivated by intrinsic interest and perceived importance. Overall, the study

highlights the motivational outcomes of teachers' self-directed learning, offering insights into the evolving priorities and preferences that align with their teaching experience. The findings of this study imply the importance of offering different learning opportunities for teachers at all career stages in the asynchronous online learning academy. To contextualize this in our design case, teachers with lower experience in teaching literacy may be more interested in learning pedagogical strategies to teaching writing, whereas teachers with higher levels of experience may feel they are already familiar with such strategies and prefer focusing on the technical aspects of the platform. Consequently, the motivational outcomes for the entire audience would be increased.

According to Liu et al (2019), teachers can transition from extrinsic to intrinsic motivation, with their perceived values and external tasks influencing the optimization of their practice during the initial stages of development. Their research emphasizes the importance of professional guidance and deep-level teaching practices in shaping teachers' motivation. It particularly suggests that a balanced approach is necessary, considering teachers' individual values while avoiding an overemphasis on external goals. The findings emphasize the significance of creating an environment that fosters positive feelings toward the training process and acknowledges the values teachers perceive, as this can promote intrinsic motivation, improve teaching practices, and contribute to positive educational outcomes. Training literacy is a difficult task for teachers because there are multiple approaches to reading and writing, and teachers who come to the course with an undeniable set of skills may increase their engagement with the platform and increase the perceived relevance of the content they are learning. It also highlights the importance of collaborative activities in increasing relevance. Although the training is a top-down task mandated by districts that utilize the platform, allowing teachers to have as much flexibility in training activities would be necessary.

Means et al (1997) focused on relevance-enhanced materials in instruction. Their materials were carefully designed to align with the learning objectives while considering time and cost constraints during development and implementation. They aimed to be socially acceptable to the audience and compatible with the delivery system. Relevance enhancement involved the use of goal orientation and familiarity strategies. Goal orientation strategies were integrated at the start of instruction and when introducing new concepts. Familiarity strategies were employed throughout the instruction when appropriate. Additionally, the instruction incorporated concrete examples and familiar analogies to enhance understanding. The results showed that the relationship between motivation, especially confidence, and achievement was strong. The study indicates the importance of considering the relevance of instructional materials when designing instruction for specific learner groups. The study identified two types of strategies that can enhance relevance: goal orientation strategies and familiarity strategies. Incorporating these strategies, like stating the

lesson objectives, using personal pronouns, providing concrete examples, using analogies, or highlighting the practicality of the content and instruction, improved the motivation and achievement of learners. However, they also noted that the extent of relevance enhancements required in instruction may vary depending on the context. Hence, we will consider the relevant strategies for the design of the literacy tool's online learning academy. Courses will contain clear lesson objectives, use personal pronouns to make the content more inviting, concrete and relevant examples will be provided to ensure there is a connection between learned content and actual lived experiences, and the practicality of the content will be highlighted through the course by encouraging learners to complete certain steps during or after learning activities.

Lastly, Keller (2010) researched the outcomes of utilizing the ARCS framework to improve motivational design in learning experiences. With relevance being one of the main goals to improve motivation in learning, Keller (2010) stated that the main question to be asked is, "In what ways will this learning experience be valuable for my students?" (p. 117). He explained that learning is perceived as being beneficial to one's work, but it can also be improved when teaching and learning preferences match, when the content aligns with one's personal interests, when one can connect prior knowledge and experiences to the current material, and when the performance standards are in line with one's cultural and personal values. Understanding ideas like the dynamics of goal choice, psychological needs, and motivations, future orientation, interests, intrinsic motivation, personal and social values, as well as a variety of affective and emotional states, including motives, interests, and personal goals, helps in achieving the desired goals when designing learning experiences that are fully relevant to learners. This is especially important to teachers because, as previously discussed, relevance is the biggest motivational barrier that may impede them from successfully engaging in a learning experience.

This paper delves into the real challenges in-service teachers face in their workplaces and sheds light on the consequences of their motivational issues. Our goal is to propose a design case to address the motivational issues and necessary changes to the current PD sessions, grounded in motivational theories, that will ensure the successful implementation of an asynchronous online academy for teachers and administrators. The asynchronous academy offers a literacy platform, which provides teachers with a literacy tool, fosters engagement with the course, and ultimately empowers teachers to achieve better training outcomes.

Purpose of the Study

The purpose of the study was to present a design case of a motivationally enhanced asynchronous PD

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session for in-service teachers using the ARCS motivational design model.

Research Questions

What is the design process of a motivationally enhanced asynchronous PD session for in-service teachers using the ARCS motivational design model?

Design Process

To depict the motivational design process of a PD for in-service teachers, we first present examples of motivational interventions and strategies and showcase the ARCS-based motivational design process.

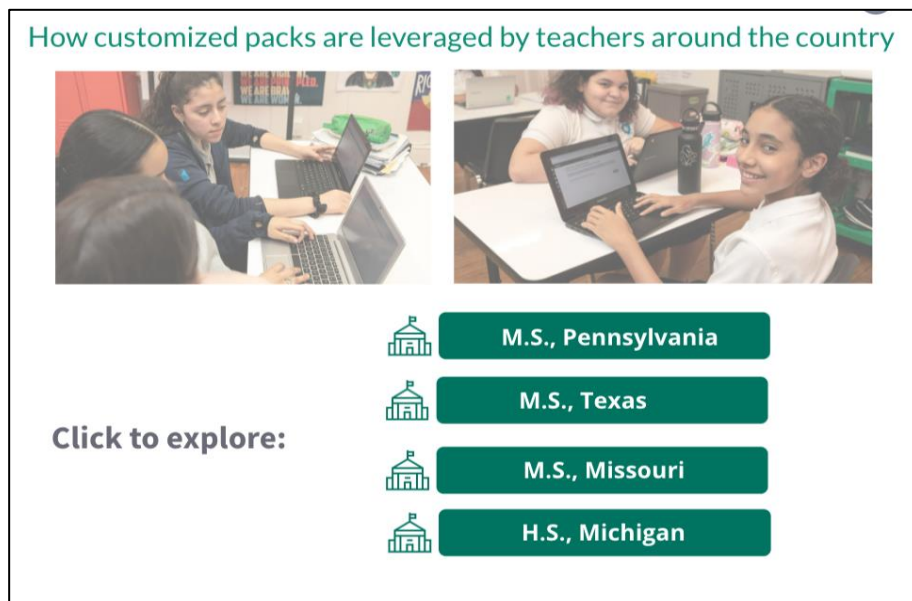
Analysis of current motivational interventions

To improve motivation and engagement in the asynchronous onboarding course for teachers utilizing our literacy platform, several motivational interventions and strategies need to be considered during training course creation. The first is to clearly communicate the training outcomes at the beginning of each course and how they support the shared vision for the school and district (Admiraal et al., 2021). With this information, teachers are able to understand what they can expect to achieve by the end of the training and set clear/realistic goals for themselves as learners. The training content should be relevant and practical for teachers using the online writing platform. Highlighting how the skills taught in the course can directly benefit their teaching and increase their students' engagement with the learning experience can increase their motivation and engagement. Incorporating real-world examples and scenarios throughout the course is another effective strategy. Demonstrating the practical application of the platform's features and showcasing the successful experiences of other teachers can inspire teachers and provide them with ideas for implementation. These considerations are important for training course design, and it reiterates the importance of having the training designers be cognizant of teachers' day-to-day responsibilities and issues with technology, as well as draw from their personal backgrounds as teachers as well.

To actively engage teachers, interactive elements such as quizzes, interactive game activities, and simulations are suggested (Foster & Shah, 2020; Mystakidis, Fragkaki, & Fillippousis, 2021). These elements encourage active participation and reinforce understanding of the platform's functionalities.

Personalization is also key in motivating teachers. Providing opportunities for them to choose specific activities or units that align with their teaching needs and preferences can increase their motivation and foster a sense of ownership over their learning process. Implementing a progress-tracking system allows teachers to monitor their progress throughout the course, which contains visual checklists that show activity completion. Visual indicators or progress bars can help teachers see their advancement, providing a sense of accomplishment and motivation to complete the course. A percentage indicator can prominently display how much of the training course a teacher has completed at any given time. Fostering a sense of community is also important, and incorporating collaborative elements into the course can help achieve this. Including discussion forums or chat features where teachers can connect, share ideas, and support each other can create higher levels of motivation and provide a platform for knowledge exchange. Positive reinforcement and specific suggestions for improvement can increase motivation and engagement. Figure 1 shows an interactive activity that connects gained knowledge and skills to real-life applications in the classroom. Teachers can click on the interactive image to explore how teachers around the country implement customized packs in their curricula.

Figure 1. Interactive activity example



To identify some other improvements to the training course to aid in increasing motivational features, some gaps in one sample course have been identified, including some course activities that do not provide examples of achievement and/or accomplishment (anecdotes, statistics, etc.). It can also be further stated explicitly how the teaching builds on their existing knowledge/skills. The course lacks analogies or metaphors to connect the current material to processes and skills that the teachers are already familiar with. The course also does not allow students to choose the subject of their assignments, even though they can freely skip activities. The importance of relevance, as stated by Keller (2010), includes allowing learners to keep track of their own learning and having a clear way of tracking short-term progress toward their goals. This helps make the coursework feel more relevant. Therefore, these strategies need to be considered to improve motivational features and perceived relevance, and to increase engagement with the course.

Other relevancy strategies have been identified as important for this sample course and will be included in further iterations of the course. Training course designers introduce gamification elements, such as badges, levels, or leaderboards, to create a sense of achievement and healthy competition among learners. These elements add a fun and engaging dimension to the course. Additionally, implementing features to allow for regular communication with learners through email updates or course announcements is essential. Informing them about upcoming modules, new resources, or additional support can keep them engaged and motivated. At this moment, our LMS does not provide such features, but training course designers understand the importance of providing teachers with timely content and access to resources.

Lastly, celebrating the milestones and achievements of learners throughout the course is important. Recognizing their efforts and accomplishments through virtual awards or public recognition fosters a positive learning environment. Implementing these suggested motivational interventions and strategies would allow our asynchronous online training course to effectively engage and motivate teachers, supporting their learning and mastery of the online writing platform and increasing their perceived relevance in the coursework.

Systematic motivational design process to create motivationally-enhanced PD

In this section, we describe the systematic motivational design process based on the 10 steps of the ARCS-based motivational design model for a training course in the online academy (Keller, 2010).

Stage 1. Obtain course information: This asynchronous course is the third installment of a four-part onboarding series for teachers learning to utilize an online writing platform. Its' main learning objective is to fully train teachers on how to navigate the platform's library of online activities, select and preview activities for students, explore pre-made activity units, and preview the student dashboard. Teachers will gain the ability to create customized activity packs, browse featured packs, and organize selected activities to create coherent learning units aligned with their objectives. The course is delivered online through an accessible learning management system, enabling self-paced learning from any location. While there may not be a live instructor, support resources, like access to a support email line, are available for personalized guidance and assistance with technical navigation and course content.

Stage 2. Obtain audience information: The target audience for this course comprises teachers who may fall into two categories: those who are new to the online writing platform and those who possess some level of prior familiarity with it. These teachers are eager to expand their teaching practices and embrace the opportunities offered by the platform's features and resources. They approach the course with a positive attitude, displaying motivation and enthusiasm to learn how to navigate the platform's activity library, select and preview activities for their students, explore pre-made activity units, and preview the student dashboard. While some participants may already have experience using educational technology tools or platforms, it is not a prerequisite for enrollment. The training course is designed to cater to teachers with basic computer literacy skills, familiarity with online communication tools, a foundational understanding of teaching concepts, and proficiency in written and spoken English, all requirements are clearly stated in the course description. It is also important to note that some teachers are mandated to take the training course, while others may discover the online academy on their own (which increases their intrinsic motivation). By leveraging existing skills and fostering a positive learning mindset, teachers are ready to actively engage with the course content and make the most of the training experience, whether they come to the course with intrinsic motivation, or this is a top-down mandated task.

Stage 3. Analyze audience: The teachers participating in this training course are primarily 4th to 12th-grade teachers in American schools. They may be motivated by various goals, including improving instructional practices, engaging students in writing, streamlining the grading of activities in the platform, and professional growth. Root causes that influence their motivation may include limited knowledge and confidence in navigating technology or the platform itself, uncertainty in selecting and organizing activities, concerns about utilizing pre-made activity units, potential fear of technology or resistance to

change in teaching practices, and perceived lack of time and resources with technology usage. However, these influences can be modified through clear tutorials, practical examples, peer collaboration, addressing technology-related fears, providing flexibility in course structure, and highlighting the positive impact of the platform on student learning outcomes. The course will address these causes to effectively motivate teachers to embrace the platform, integrate it into their teaching practices, and strengthen their overall teaching experience and student success.

Stage 4. Analyze existing materials: This course offers several positive “relevance” features that contribute to its effectiveness. Its asynchronous nature provides participants with flexibility, allowing them to engage with the content at their own pace and convenience, and all courses are designed to be completed in less than one planning period. The comprehensive coverage of topics ensures that teachers gain a holistic understanding of the platform's features and functionalities. The self-directed learning approach empowers participants to take ownership of their learning journey and explore the platform independently. Lastly, the availability of personalized support resources such as discussion forums and email assistance ensures that teachers can receive guidance and clarification when needed, enriching their overall learning experience. Course designers will also leverage existing live workshops and asynchronous resources to re-package or create content for the course, to ensure all PD opportunities offered by the platform stay consistent in messaging.

One of the main deficiencies in the training is the potential technological skills barrier. As this course addresses how to use an online platform, some teachers may lack the necessary technology proficiency, and the fully asynchronous format may not adequately address their needs. Another problem is the potential motivational barrier for non-mandated participants. With mandatory completion, their motivation levels may be lower, which might impact their engagement and commitment to the course. Additionally, the limited interactivity of the asynchronous format may hinder collaborative learning and real-time discussions, reducing the overall engagement and interaction among participants. One of the related issues is the availability of alternative courses and live workshop options. With other asynchronous courses and live workshops as alternatives, teachers may choose different avenues to acquire the necessary skills, potentially affecting enrollment and completion rates for this specific course. Additionally, special attention needs to be given to non-mandated participants who enroll spontaneously. Strategies should be implemented to motivate and engage them, ensuring they perceive value in completing the course and receive the necessary support throughout their learning journey. Furthermore, ensuring technological

access for all participants, including reliable internet connections, suitable devices, and conducive learning environments, is crucial to maximize the course's effectiveness and reach.

Stage 5. List objectives and assessments: The motivational design goals for this course are to empower teachers with the skills and confidence to navigate and utilize the online writing platform effectively, create engaging learning units, and maximize student outcomes. Teacher participants' behaviors that support these goals include actively exploring the platform's activity library, demonstrating proficiency in navigating its features, selecting and sequencing activities that align with learning objectives, showcasing the ability to curate coherent learning units; engaging in the exploration of pre-made activity units, adapting them to suit their teaching style and student needs; and effectively utilizing the platform's features to boost student engagement and writing proficiency. Confirmation methods for these behaviors may include self-assessment quizzes or activities within the course modules, completion of practical exercises demonstrating the creation of learning units, and feedback from instructors or peers through discussion forums or collaborative activities. These confirmation methods serve to reinforce and validate teachers' mastery of the course objectives and their ability to apply the acquired skills in real-world teaching scenarios.

Stage 6. List potential tactics: This course employs several tactics to strengthen teachers' motivation and engagement. In the beginning, teachers are provoked by a real-life scenario that stimulates curiosity and mental conflict, prompting them to create an activity pack to address a writing need by exploring the activity library. Clear training goals are communicated, along with statements describing the expected outcomes and observable behaviors that demonstrate successful knowledge/skill acquisition. Throughout the training course, intrinsic satisfaction is encouraged by highlighting the enjoyment of the subject matter and facilitating the immediate application of knowledge. Teachers' perceptions of fair treatment are fostered through a diverse range of settings, their personas, and environments in course activities. The end of the course incorporates variation in writing function and includes open-ended reflection questions to encourage active response and deep reflection. The expected behaviors are reiterated, and teachers are given the opportunity to evaluate the course and provide feedback to improve the overall learning experience. These tactics collectively aim to motivate teachers, promote intrinsic satisfaction, and foster a sense of fairness and active engagement throughout the course.

Stage 7. Select & design tactics: Several tactics are to be designed to increase perceived relevance and overall motivation to complete the course. A few enhancement tactics that are utilized include:

- Provoking curiosity: stimulating mental conflict and curiosity at the beginning of the course enhances teacher engagement and motivation.
- Clear training goals: clearly communicating the immediate benefits and training goals helps teachers understand the purpose and relevance of the course, improving their motivation to engage with the content.
- Observable behavioral expectations: providing clear statements of expected behaviors as evidence of successful training sets clear expectations for teachers, increasing their motivation to demonstrate those behaviors.

Sustaining tactics will also be utilized as follows:

- Intrinsic satisfaction: applying strategies to support teachers' intrinsic enjoyment of the training experience throughout the course helps sustain their motivation and engagement.
- Perceptions of fair treatment: Incorporating a variety of settings, learner personas, and environments throughout the course activities helps sustain teachers' perceptions of fair treatment and fosters their continued engagement.
- Reinforcing intrinsic satisfaction: Throughout the course, emphasizing the intrinsic satisfactions of the subject matter and guiding teachers to apply their knowledge immediately helps sustain their motivation and enjoyment of the training experience.
- Reflective questions and feedback: Including open-ended reflection questions, allowing for course evaluation, and providing opportunities for teachers to give feedback to sustain their active involvement, reflection, and continuous improvement.

Employing enhancement and sustaining tactics to the course aims to initially capture teachers' attention and curiosity, while also providing ongoing support, motivation, and satisfaction to sustain their engagement throughout the training.

Stage 8. Integrate with instruction: To effectively combine motivational and instructional design, it is crucial to intertwine the motivational strategies with the instructional design elements of the course. The instructional plan should be revised to incorporate motivational tactics seamlessly, ensuring they are

embedded at appropriate points to enhance learner engagement and satisfaction. The introduction can be revised to captivate teachers' attention by presenting a real-world scenario that ignites curiosity and highlights the significance of the writing platform. Clear communication of the training goals within the instructional plan will help teachers understand the immediate benefits of the instruction and how it relates to their needs as teachers. Additionally, the instructional plan should provide specific guidance on how teachers can demonstrate the expected behaviors, aligning them with the observable behaviors outlined in the motivational plan. Throughout the instructional plan, opportunities can be created for teachers to actively apply their knowledge, experience intrinsic satisfaction, and reinforce fair treatment. This can be achieved through practical exercises, interactive activities, and authentic writing tasks. Reflection and feedback moments should also be incorporated into the instructional plan, enabling learners to reflect on their progress, engage in open-ended reflection questions, and provide feedback on their training experience, thereby promoting continuous improvement and reinforcing teacher involvement. Integrating motivational and instructional plans allows the course to maintain a cohesive and engaging training experience for teachers as they navigate the online writing platform. Below is a list of suggested revisions to the course, following a motivational design revision:

- Revise the introduction to include a captivating real-world scenario that sparks curiosity and highlights the importance of the writing platform.
- Clearly communicate the training goals within the instructional plan to emphasize the immediate benefits and relevance of the instruction for teachers.
- Provide specific guidance and examples in the instructional plan to align with the expected observable behaviors outlined in the motivational plan.
- Incorporate opportunities throughout the instructional plan for teachers to actively apply their knowledge, experience intrinsic satisfaction, and reinforce fair treatment.
- Integrate dedicated moments for reflection and open-ended reflection questions within the instructional plan to encourage teachers to reflect on their progress and provide feedback on their training experience.
- Ensure seamless integration of motivational strategies within the instructional plan to create a cohesive and engaging learning journey for teachers as they navigate the online writing platform.

Stage 9. Select and develop materials: When curating and adapting materials for this training course, it is important to follow a systematic approach. Begin by evaluating existing resources, ensuring their

relevance, accuracy, and alignment with the course objectives. The platform currently offers live workshops (with the online academy being a requested offer to better fit teachers' busy schedules in an asynchronous, self-paced format). A lot of resources exist to help users utilize the platform in multimedia format, including PDFs, help articles, video tutorials, and self-serve support help. These resources should be utilized, however, their content should be adapted to fit the clearly defined training objectives for each module or topic, as they will guide the selection and modification process. Conduct a comprehensive search for supplementary materials that enhance the existing resources, considering different learning preferences. As the training designers select materials, they should ensure materials are accessible and engaging for all course participants, including modifying the chosen materials as necessary to align with the course requirements and updating outdated information or simplifying complex concepts, and seeking feedback from participating teachers to refine the materials and enhance the training experience. By following this approach, the course materials will be thoughtfully curated and modified to create a valuable learning environment.

Stage 10. Evaluate & revise: To evaluate this asynchronous course designed to train teachers how to use the online platform, the following steps will be applied:

- First, determine the specific information needed to assess the course's effectiveness. Questions may focus on aspects such as the teachers' perception of the course's relevance to their needs, whether it captured their attention, if it boosted their confidence in using the online platform, and if they were satisfied with the learning experience. Evaluation questions may include “Did the course content align with your specific needs and goals for using this online platform?” and “Were you satisfied with the overall learning experience and the support provided during the course?”
- evaluation will occur, such as at the end of the course or at different stages to capture ongoing feedback. Both strategies may be utilized in the academy.
- Once the data is collected, analyze the results to gain insights into course content and effectiveness. Summarize the findings based on the information gathered. This may involve creating a list of frequently mentioned points and identifying patterns or common themes. If a questionnaire was used, analyze the responses to determine the frequency of different types of feedback.

Figure 2. Sample course evaluation survey

Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The content of the course was relevant and applicable to my needs as a teacher. (Leave blank if you're not a teacher.)	☐	☐	☐	☐	☐
The course was effective in helping me understand how to use Reading for Evidence.	☐	☐	☐	☐	☐
I would recommend this course to other teachers or colleagues.	☐	☐	☐	☐	☐
The eLearning platform where I completed the course was easy to navigate and use.	☐	☐	☐	☐	☐

Please weigh your knowledge of this course topic:

	Low	Below Average	Average	Above Average	High
before completing this course.	☐	☐	☐	☐	☐
now that you have completed this course.	☐	☐	☐	☐	☐

How would you rate this course?

★ ★ ★ ★ ★

Was there anything you wish was covered in this course, but wasn't?

Please provide additional comments or feedback on this course:

- Based on results, training designers will draw conclusions to inform any necessary revisions or improvements to the courses. Identify specific areas of concern or suggestions raised by the teachers. For instance, if teachers frequently mention challenges with navigating the online platform, it indicates the need for revisions in the course's instructional design or user interface. It is crucial to gather specific feedback that can guide the improvement process rather than relying on general statements. Additional data may need to be collected if general statements lack sufficient details.

A wide range of evaluation frameworks have been used for the evaluation of PD, yet the dominant approach is a questionnaire or survey (Ahadi et al., 2024). In this paper, we suggest a sample course evaluation survey as a template for the course evaluation (Figure 2). Evaluation questions may change depending on course content and may include other rating or open-ended feedback questions.

A combination of methods can be utilized to evaluate the effectiveness of the motivational strategies/tactics implemented in this online PD course, including the course interest survey (Keller, 2010). The survey items include Likert-scale questions to measure the effectiveness of each tactic in addressing the identified motivational problems. It assesses participants' perceived attention, relevance, confidence, and satisfaction with the course. In addition, a series of interviews can be used to explore teachers' training experiences with the motivational strategies, their perceptions of the effectiveness of certain motivational tactics utilized by course designers, and any challenges or suggestions for improvement.

Conclusion

In this paper, we focused on the importance of PD training design for motivational enhancement for teachers. We discussed the motivational problems they face when engaging in such activities and presented a case of motivational design based on Keller's 10 steps of the motivational design process using the ARCS model. It highlights two key motivational problems: the lack of perceived relevance and limited autonomy and choice. These problems can lead to disengagement, decreased motivation, and negative consequences for both teachers and students. To address these issues, we proposed strategies to be included in one of the online learning academy's courses, such as tailoring content to specific challenges, providing autonomy in selecting development opportunities, and incorporating interactive and personalized elements. Prior to collecting evaluation data on the course, there are a few considerations to keep in mind. The technological readiness of the teachers should be assessed to ensure they can navigate the online platform effectively. Clear instructions and support should be provided to mitigate any potential challenges. Additionally, it's important to set clear learning outcomes at the beginning of the course and communicate them to the teachers. This helps them understand the purpose of the training course and sets clear goals for their engagement. Moreover, the strategies implemented should cater to the diverse range of participants, considering both goal-oriented and performance-oriented learners. Finally, maintaining regular communication with teachers, providing feedback, and celebrating their achievements are necessary to contribute to a positive and motivating learning environment (Tantawy, 2020). These

considerations and suggested strategies will increase learner engagement, improve focus, and enhance participants' confidence in their ability to succeed.

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