## School District 43 (Coquitlam): Improving Pedagogical Support through the Application of Technical Help Desk Principles?

Every school, district and system has been challenged to find new and productive ways of using limited educational resources to support program implementation and, more specifically, relevant teacher learning. School District 43 in Coquitlam, BC, Canada recently looked at this challenge in the context of preparing to roll out Office 365 (O365). The district saw O365 as a strategic linchpin, a ubiquitous platform that would serve as common base supporting the transformative use of technology in classrooms district-wide. Likewise, the district had recognized that investment in people and their learning was fundamental to the success of any change initiative where new skills and capacities were required. They did not want a repeat of so many earlier educational technology initiatives where the work facilitated meaningful change for a small group of engaged teachers, but accomplished limited results with the rest. Given the importance of O365 in the transformational vision, they were keen to identify structures that could ensure adequate support for all teachers, regardless of ability level. Ultimately, like emerging approaches to teaching in general, there was a need to add personalized learning layers to their professional development strategy. Committing to a more personalized approach sounds smart, but actually accomplishing personalization while working with very limited resources seems like a daunting task.

With this in mind, the District began exploring out-of-the-box ideas to make learning more personal. Like many districts they already had a full menu of learning options available, including regular, after-school topical workshops, professional focus days offering concurrent learning sessions and team-based pilot projects. The sense however, was that something was missing. It was known for certain that if a teacher took a workshop, the topics learned in the workshop needed to be practiced soon after (like the next day) or there was a high probability that the knowledge/skills gained would never be practiced and the learning relegated to "something I saw once".

Part of personalizing professional learning includes challenges related to personal context. If a teacher tries a new approach and hits a barrier, or worse, lacks confidence to try in the first place, then it is unlikely the new learning will make its way into long-term teaching practice. To get sustainable shifts in practice, follow-up in small groups or individual levels are necessary. Further, should a teacher need direct classroom support to have the confidence to try something new, overcome potential barriers and ensure the learning relates to their personal context, then more personal support would be required. So the question, is it financially viable to dedicate human resources to facilitate personalized learning models?

The District began to think about other environments personalized support was required and what made those models sustainable. As it turns out, the District had such a model existing within the organization – the Technology Service Desk. The District service desk handles more than 17,000 support requests per year. If a service desk were to deal with every request as a completely new problem, with every technician starting from scratch in identifying, studying and solving the problem, the helpdesk would collapse under the weight of unmanageable expectation in relation to staff size. So, common strategies are employed to make the service work more efficient. These strategies include:

- Identifying services provided and code tickets to the appropriate service area Have ready made responses for the most common and basic issues to allow quick, low effort responses to many issues and questions.
- Having layers of expertise, where cases escalate up the chain to increase both knowledge requirements and time commitments as required.
- Having systems that ensure status and progress on all support is tracked, monitored, inventoried and ultimately closed once the service is complete.
- Using the data generated from the service cycle to improve the same cycle.

Without these elements, it would not be possible for so few people to service so many requests in a way that would ensure success. It struck District leaders that many of these same principles could be applied to our learning support structures to achieve some similar gains and possibly make a more personalized learning support structure possible with relatively little staffing. And with this, the idea of the Pedagogical Helpdesk was born.

The approach started with an inventory of available instructional support staff who could "work" the Helpdesk. The district supports over 30,000 students and had an Associate Director for Educational Technologies, a Principal of Technology Implementation and two teacher coordinators, one for Technology and Libraries, the other half-time Assistive Technologies. To make the model work, they needed more hands on the ground, so 3.0 FTE of staffing was allocated to create 5 new part-time teacher positions. These teachers taught part-time in the classroom (challenged to practice what they preached) and serviced Pedagogical Helpdesk requests for the remainder of their day. A local network of "Technology Champion" teachers were also identified throughout the District who were already known to have capacity and happy to share their skills with others, but were limited to their own schools.

After identifying available resources, the next step was to organize them. An online "Helpdesk" system was created, similar to a traditional Technical Servicedesk, where users (in this case classroom teachers) identified a category (such as General O365, OneNote Classroom, Teaching Coding, etc), described the help they needed, identified the scope of delivery required (one to one, whole staff, small group, etc.), and provided a bit of contextual background. A dedicated team member, would review requests on a daily basis and categorize the responses into support levels. In many cases, support could be provided from a growing body of pre-created support materials, ranging from FAQ type responses to online training videos. If this was not sufficient, then the request would be "escalated" to a team member (referred to as a Technology Support Teacher or TST) for service. Initially, the assigned support would attempt to assist remotely using email, Skype and through Microsoft Teams. Microsoft Teams proved particularly useful at pulling teachers into small groups in order to learn together, but more efficiently than individualized site-visits. Next, if more assistance was required the TST would again escalate the request, choosing to connect the requestor to a Technology Champion in the area or if an adequate connection was not deemed to be available, follow up with a site visit. The highest (and most timeconsuming) level of support is fully personalized site-based services, including team teaching and local demonstration teaching.

Like with any service desk, the more the resource is used, the more efficient the system becomes as both the knowledge sets and volume of training resources available gradually increase. Also, since requests and resolution activity are tracked, the District has been able to glean information about adoption activity and progress by level (elementary, middle, secondary) and individual schools in ways that were never previously possible. This could inform further improvements as other initiative deficiencies are identified and resources can be used in an increasingly targeted fashion. As a result of this model, the number of "pedagogical help requests" increased from a base of zero up to 1633 "teacher touches" in the first 7 months of operation. All generated by adding just 3.0 FTE to district staffing. A bargain by any standard!