

# Medical Professionals Require Curricula Support to Overcome Their Reluctance to Embrace Self-Directed Learning in Response to COVID-19

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**Abstract:** As a result of the 12 March 2020 lockdown of academic institutions in response to COVID-19, overnight, self-directed learning via online platforms became indispensable for all medical professionals. The curricula of medical professionals and research regarding adult learning recommend self-directed learning as the preferred method of learning. Yet medical professionals, especially medical students, have been reluctant to embrace self-directed learning for various reasons. Those who do adopt self-directed learning willingly have been found to have a passion for learning as well as a higher grade point average (GPA). One method for encouraging self-directed learning in medical professionals is the multi-disciplinary, online University of Toronto Health Narratives Research Group. The limitations regarding medical learning resulting from COVID-19 show no sign of abating. Therefore, medical professionals, especially medical students, would do well to participate in multi-disciplinary groups like the Health Narratives Research Group to encourage and enrich their ability to self-direct their learning. Furthermore, the curricula of medical programs should support their efforts to do so through providing opportunities to engage in such multi-disciplinary narrative research groups.

**Keywords:** COVID-19; lockdown; self-directed learning; medical professionals; medical students; curricula; higher GPA; narrative research; multi-disciplinary

## 1. Introduction

Self-directed learning has been identified as the most appropriate form of learning for adults [1]. It is demonstrated when learners take responsibility for organizing and managing their own learning through identifying gaps in their knowledge, and critically appraising information they seek out [2]. Such learning represents an approach where learners diagnose their requirements, identify their goals, select strategies, and design their evaluations for performances and outcomes. It depends on learners demonstrating intrinsic motivation, integrity, agency, diligence, perseverance and grit towards their learning [3]. This occurs through being continuously engaged in acquiring, applying and creating knowledge and skills in the context of their unique needs [4]. Adults are found to have a deep need to self-direct [5]. This indispensable need for learners to self-direct grew exponentially overnight as a result of the imposed COVID-19 lockdown for academic institutions on 12 March 2020 [6]. Yet, however necessary and in accordance with a deep need, the adoption of self-directed learning continues to pose a challenge in the education and engagement of medical professionals, especially medical students, who remain reluctant to embrace self-directed learning [7]. Why medical professionals should work towards assuming self-direction, where they might not be inclined to do so otherwise, will be addressed here.

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Medical professionals help to identify, prevent or treat an illness or disability [8]. Included are physicians, nurses, hospice workers, emergency medical technicians, and other trained caregivers [9]. Although early research into self-directed learning in adults was primarily intended for professional learning [5], historically, medical students, in particular, have been unwilling or unable to participate in self-directed learning [10]. Dissatisfaction has been identified as incompatible with self-direction in medical students' learning [11]. Those medical students who do participate in self-directed learning demonstrate a passion both for learning and self-direction. In addition, they demonstrate effective self-management skills [12]. Where such skills are evident, self-directed learning then coincides with higher GPA [13].

A readiness for self-directed learning for medical professionals is then best associated with developing the skills for self-directed learning habits [14]. However, the required habits are unlikely to develop fully in medical professionals unless learners are given specific instructions on what to study [15]. Based on previous work with nursing students, four factors of reliability in identifying medical students as self-directed were recognized: 'Critical self-evaluation', 'Learning self-efficacy', 'Self-determination' and 'Effective organization for learning' [16]. Dependent on these factors, self-directed learning can be intentionally developed through planned educational interventions [17]. Reinforced readiness for self-directed learning is necessary for medical professionals to develop self-directed learning habits [18, 19]. Furthermore, it has been argued that self-direction should perhaps be introduced later in learning once medical professionals feel confident regarding their understanding of the discipline [20, 21] and once medical professionals have demonstrated skill in their area of specialty [22, 23]. However, after the COVID-19 lockdown of universities and the teaching aspect of hospitals, medical professionals no longer had the in-person opportunity to be instructor-led as they had previously expected, making their preferred method of learning untenable.

The question is, why do medical professionals, and most specifically medical students, avoid self-directed learning when it is: available to them, the most effective form of learning for adults, and recommended by their curricula? Self-direction can only be sustained in environments where the learner demonstrates a passion for learning the skills of a discipline. In having to learn large amounts of disparate information quickly to gain expertise in their chosen profession, medical students' passion for medicine may not be in obtaining this large amount of information but in becoming future practicing medical professionals. As it is those medical students who are interested in the information itself who are more likely to obtain a high GPA, it is understandable that a high academic standing is a coexisting factor with self-directed learning in medical students.

Medical students find themselves overwhelmed with the amount of information not immediately interesting to them that they must learn very quickly. As such, they may choose to be other-directed at this point in their learning just because they are not passionate about the information per se. Thus, in this circumstance, there may be no conflict in self-directed learning being both appropriate for medical professionals and not appropriate for most medical students. A study of medical students' views on self-directed learning found that students appreciated being able to select their sources, time, space, methods and how they organized their schedule. On the other hand, they felt that the disadvantages from time wasted in finding sources and mentors, overcoming language barriers and in following poor leads outweighed the advantages to self-directed learning [24]. Yet, following the COVID-19 lockdown, this preferred approach to their learning is one that is no longer available to medical students. With the continuing limitations of COVID-19, supported by their institutions, medical students now need to apply their abilities to learn to reduce these personally-imposed barriers to self-directed learning.

Concurrent with the need for self-direction in medical professionals the demand for multi-disciplinary, community-based collaboration and partnerships has developed as funding for medical programs and research is often based on this type of inclusive team-

work. The reason for this is its ability to produce immediate-use outcomes [25]. Interestingly, multi-disciplinary approaches may be the most likely to encourage self-direction in medical professionals [26]. With little current research on the effectiveness of multi-disciplinary approaches in self-directed learning for medical professionals, the University of Toronto Health Narratives Research Group (HeNReG)—an inter-professional and multi-discipline group—in actively encouraging a particular strategy for self-directed learning to engage all levels of medical learners, offers results in this area.

## 2. Methods

The HeNReG—co-founded in 2012 by the author with support by the Jason A. Hannah Professor in the History of Medicine at the University of Toronto, Edward Shorter—has been offered in association with the Department of Psychiatry through the Health, Arts and Humanities Program directed by Allan Peterkin MD since 2015. It is available to researchers across the University of Toronto. The group consists of participants from various backgrounds and academic levels and includes membership to a private Facebook group. Post-lockdown, this became the hybrid online platform through which the group members met for two hours weekly [27].

Participants often enter the group identifying as “burned out” with respect to their research. They are aided and mentored in becoming self-reflective and reinvigorated about their professional pursuits. This comes in relation to questioning from the entire group following a particular method devised by the author (who acts as the facilitator) [28]. It is based on writing 5-minute responses to prompts created by the facilitator and then sharing these responses with the group. This includes incorporating the comments of others in developing their insights. Each perspective is considered equal in providing an aspect of the truth. The goal of this form of narrative research is promoting an interpretation of reality dependent on adding together many different perspectives. It is a view of truth influenced by the later philosophy of Wittgenstein [29] that contrasts to similar narrative researcher programs purporting that there are many truths rather than a single one constructed from various points of view [30, 31, 32, 33].

Participating in a diverse, multidisciplinary group like the HeNReG the ability of medical professionals to self-direct is enhanced by helping members to clarify what they personally value of their learning [19]. Yet, to participate in the self-directed learning expected at the HeNReG, self-management skills of medical students need to be effective [8]. Although maturity is seen as the most important means for developing these skills [12] limited self-management skills were also identified in most seasoned medical professionals, keeping them from participating in the HeNReG when they indicated their wish to do so. As an example, even though they were aware there was of the private Facebook group for online participation, senior medical professionals with time conflicts were unable to think of solutions to how they might participate in the HeNReG, that is, unless they had participated in narrative research in the past.

The HeNReG is a co-regulation program [34] with both a solution-focused approach and mentorship in promoting the addition of different points of view in a broader post-secondary environment. Successful participation is dependent on listening carefully to the views of all members of the group to co-construct truth.

## 4. Results and Discussion

For the 2020/21 academic year, there were nineteen members of the HeNReG in total. Four of the nineteen were medical professionals. As seen in Table 1, the total number of medical professionals initially interested in joining the HeNReG was seven. However, three of those medical professionals were not willing or able to engage with the collaborative strategies of the HeNReG. For those who were able to join, half of them were unable to get past their anxiety and feeling of being overwhelmed by the amount they would personally have to change to be a regular participant in the HeNReG. Those who did engage had participated in narrative research in the past. By participating in the HeNReG

they increased their ability to self-direct their learning by improving their understanding of what they valued in relation to their learning.

**Table 1.** Medical professionals who indicated interest to join the HeNReG in the 2020/21 year.

1 <sup>st</sup> contact	Position, Medical specialty	Result in relation to the HeNReG
20/09/20	General practitioner	Joined, participated regularly
26/09/20	Retired Department head	Joined, never participated
29/09/20	Psychiatric Resident, PGY2	Couldn't commit to fully engage
29/09/20	Palliative medicine physician	Considered group an inappropriate fit personally
29/09/20	Medical student (second year)	Clinical schedule up in the air
30/09/20	Pediatric Resident (first year)	Joined, participated irregularly
22/10/20	Medical student (second year)	Joined, participated most weeks

For medical students, with little experience and less time, providing additional opportunities for self-directed learning may continue to present a challenge even with the need for adopting self-directed learning imposed by COVID-19. The drive to meet the standards of their profession often supersedes that of being a self-directed learner. As such, when they do engage in self-directed learning programs, medical professionals may become anxious and overwhelmed with the experience. This need to meet standards first and self-direct their learning second means that medical students (unless they have a strong knowledge base) generally avoid self-directed learning programs and only those medical professionals already familiar with narrative research are able to sustain their commitment to determining their values related to learning and to not become anxious and overwhelmed. Yet, few opportunities for multi-discipline narrative research are currently available and the method developed for the HeNReG remains unique. This lack of narrative research opportunities may play a significant role as to why medical professionals, especially medical students, are reluctant to engage in self-directed learning.

## 5. Conclusions

As a result of the continuing social-distancing limitations imposed by COVID-19 for post-secondary institutions [35], medical professionals must now access what they value as professionals to become increasingly self-directed or be unable to complete their required professional learning. The most pressing reason is that in-person assistance by instructors is no longer available [36]. Participating in co-regulated, solution-focused and mentored online groups similar to the HeNReG holds promise for encouraging their self-direction once medical professionals resolve they are willing and committed to engage with them. Furthermore, given that familiarity with narrative research supports self-directed learning, the curricula of medical programs would do well to promote the effectiveness of multidisciplinary narrative research to improving the ability of and likelihood that during lockdowns medical students in particular participate in such groups, increasing their ability to self-direct their learning.

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