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1 Teaching Tip: Setting Up and Running Online Communities of Practice (CoPs) for Veterinary

2 Educators

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32 ABSTRACT

- 33 Communities of practice (CoPs) are social systems consisting of individuals who come together to
- 34 share knowledge and solve problems around a common interest. For educators, membership of a
- 35 CoP can facilitate access to expertise and professional development activities and generate new
- 36 collaborations. This teaching tip focuses on online CoPs and provides tips for setting up and running
- 37 such communities. The initial planning phase involves establishing the purpose of the CoP, recruiting
- 38 an administrative team, designing the structure of the online environment, and choosing a platform.
- 39 Once the online platform is launched, running the CoP involves building the membership,
- 40 encouraging engagement (primarily in discussion forums), finding ways to create and share useful
- 41 resources, and sustaining the community as an active and effective CoP. We also describe a specific
- 42 example of an online CoP for veterinary educators involved in clinical skills teaching. The
- 43 membership has grown to represent an international community who engage in a range of activities
- 44 including sharing knowledge, tips and ideas, asking questions, discussing challenges and promoting
- 45 collaborative activities.

46 KEYWORDS

47 Community of practice, clinical skills, collaboration, veterinary education, online communities

48 INTRODUCTION

The idea of a community of practice (CoP) was first explored over thirty years ago.¹ A CoP is an 49 50 example of social learning, where members are informally brought together by a 'common interest' 51 and build collaborative relationships, learn from each other and benefit from the collective expertise within the community.^{2,3} Membership of a CoP is self-selected and participants can choose to join 52 53 the community, unlike more formal organizations where managers select team members who are 54 beholden to them.⁴ Members will share knowledge and expertise, discuss and solve problems, transfer best practices, and develop their own professional skills.⁵ CoPs typically start with a few 55 56 core members, who may be experts in the field and/or enthusiasts for the topic and tend to lead 57 most of the activities, at least initially. As other members join some will contribute to discussions, but most tend to remain on the periphery as observers.^{6,7} 58

Although initially described as a face-to-face community, it has naturally developed to fit within the 59 digital world. Wenger indicated that the rise of social media is well aligned to fitting in with CoPs.² By 60 use of a dedicated online platform, the members of the community can actively engage with and 61 62 support each other in achieving a common goal.⁸ In online knowledge-sharing CoPs, members need 63 to be willing to put forward ideas, trust each other and accept the CoP as a valuable source of 64 information.^{9,10} An online presence for a CoP also enables participation from members of the 65 worldwide community, who may have otherwise been unable to collaborate through geographical isolation or financial limitations.^{11,12} The activity within online communities is asynchronous and 66 67 therefore can support engagement irrespective of time zone differences.

68 In many areas of education, including the health professions, CoPs have been used to enhance 69 professional and faculty development through informal group learning and opportunities for collaboration, with mentorship often developing during these discussions.¹³⁻¹⁸ Social media 70 71 platforms such as LinkedIn, Facebook and Twitter, are increasingly adopted by educators to form 72 CoPs and provide ready access to specialist knowledge and opportunities to engage in scholarship and build collaborations.¹⁹⁻²² Online CoPs also complement other forms of knowledge exchange, 73 74 such as more expensive and infrequent meetings at conferences.^{12,23} One of the challenges 75 associated with membership of any CoP is the time required to engage in an additional activity on 76 top of an already busy workload. However, the time commitment is mitigated to some extent in 77 online CoPs by the ease of access to information, being able to keep up to date and a sense of community.24,25 78

In the veterinary context, an example of an online CoP that aimed to support educators' continuing
 professional development was the Network Of Veterinary ICt in Education (NOVICE) project, funded

81 under the Lifelong Learning Programme of the European Union.^{26,27} Other online veterinary CoPs 82 have emerged to support professional groups in sharing clinical expertise, discussing work-related 83 challenges, and career development (e.g., Vets: Stay, Go, Diversify; Veterinary Voices; AAVMC's 84 Connect platform). Some have been specifically designed to support students, for example with clinicians facilitating case discussion on Twitter using a hashtag #VetFinals.²⁸ VetEd, an annual 85 86 conference dedicated to growing the veterinary education community, has embodied many of the principles of a CoP.²⁹ The original intent was to promote best practices by sharing expertise, 87 88 innovation, and ideas in an inclusive community. The resulting benefits have included bringing 89 together and growing a community, sharing knowledge and generating new ideas. These align with the benefits identified for CoPs supporting faculty development in medical education.^{17,29} 90

In creating this teaching tip, the authors have drawn upon the literature on CoPs and the team's
experiences participating in and running online communities. The aim is to provide a series of tips to
act as guidance for veterinary educators interested in setting up and running an online CoP. We also
describe an example of an online CoP, 'Veterinary Clinical Skills + Simulation'^a which was set up in
May 2020 and has grown into a successful, knowledge sharing, collaborative international
community.

97 TIPS FOR SETTING UP AND RUNNING AN ONLINE COMMUNITY OF PRACTICE (CoP)

98 The principles behind creating an online CoP remain largely the same, whether it is for advancement
 99 of veterinary educators, medical educators, or other contexts such as business development and
 100 computer science.^{4,5,7,8}

101 PREPARATION - SETTING UP THE ONLINE CoP

102 1. Establish the purpose

103 It is important to consider why the CoP is being developed -essentially its purpose. A basic model on 104 which a CoP is built embodies three structural elements; a *domain* of knowledge or area of interest 105 defining the purpose, a *community* of people who value the domain, and their shared *practice* which 106 constitutes the discussion of ideas and community's activities.⁵ Therefore, the first step is to 107 establish the purpose, which is often obvious to the team planning to set up the CoP but may be less 108 clear to others, including potential members. Clarifying the purpose enables the team to create the 109 boundaries of the CoP, identify the target community (membership), define the topics worth 110 sharing, how best to present ideas, and which activities to pursue.⁵ It is important to be able to 111 articulate the need for the CoP and what it will offer its members. Imagining the perspective of those 112 who might want to join and what they will want from it can be helpful in refining and justifying the 113 purpose because without its community the CoP will not succeed. Writing a statement about the

114 CoP and its purpose is a valuable exercise for the team and should be included in the publicly 115 available information for potential members. In a veterinary context, the purpose of the CoP can be 116 quite broad, for instance, 'the veterinary workplace' or be focused to a particular field, such as a 117 specific topic (e.g. feline medicine) or an area of education.

118 2. Assemble the administrative team

119 An administrative team will be needed and will have responsibility for the various tasks associated 120 with setting up and running the CoP. There may be sufficient capacity within the initial team but 121 typically extra tasks emerge, or specialist skills are required e.g., technical, and further members 122 need to be recruited. Usually the team members are volunteers and perform administrative tasks 123 alongside their normal work commitments, so being clear about the tasks, expectations and amount 124 of time required is important. Team members should be passionate about the topic, preferably with 125 relevant expertise, and comfortable interacting in an online environment. Another valuable 126 characteristic is being a reflective practitioner who is prepared to adapt as the community evolves 127 and changes.³⁰ Regardless of the team's existing skills and prior experience, it is helpful to provide 128 clarity around roles and training for certain tasks such as moderating online discussions. In a 129 veterinary education CoP, there will likely be the need for specific expertise of veterinarians and 130 educators, but outside help may also be useful in the form of non-veterinary technical support.

131 **3.** Define the structure of the online platform

132 The structure of the online platform needs to be planned before it is implemented to ensure it will support the activities of the online CoP. Sections within the platform typically include publicly 133 134 available pages explaining the purpose of the CoP, how to register as a member, contact information 135 for the administrative team, and the data protection policy. The membership-only area usually 136 includes sections for discussions, members' profiles, house rules, and other useful information often 137 framed as 'frequently asked questions' (FAQs). Once the sections have been identified, more 138 detailed requirements need to be defined. An example of an online CoP's structure is shown in Figure 1. 139

140 About here Figure 1: An example structure for the design of an online CoP

The core of an online CoP lies in its *discussions*. Discussions are key to enable the sharing of information, ideas and advice.^{5,9,13,17} These discussions are typically hosted on forums set out in broad topics. Within each forum, members start discussions with a post and other members respond with comments. Decisions need to be made around whether new forums can be created by members or only by the administrative team. Both are acceptable options, but more administrative control of forums tends to lead to a tidier layout with less duplication and is easier to search. Other

- 147 considerations include whether a post could be made anonymously, the circumstances under which
- pre-approval of a post may be required, and how a post could be taken down or comments on a
- 149 thread closed. Another consideration is how notifications of posts will be handled; do members
- need to be logged into the system to see a post or will automatic messages (e.g., emails) be sent out
- and if so, are these on an opt-in or opt-out basis? The discussion content should be easy to search to
- 152 help members find relevant information, including previous posts that have answered a question.
- 153 The *membership* process will involve a number of steps, including a registration form, a system to
- approve new members and associated messaging (emails). Criteria for membership should be stated
- in the publicly available information, and the administrative team need to decide if and how
- eligibility will be checked and when provision of further details will be required. Once members are
- approved, a welcome message explaining how to use the platform can be useful in encouraging new
- 158 members to explore the site and participate in the community.
- 159 House rules are important and should be easy for members to find; making the expectations clear at
- 160 the outset can help to avoid the need for administrators to remove posts or warn or remove
- 161 members. There are examples of house rules from existing communities, and these can act as a basis
- 162 on which to create a CoP's specific rules. Some rules are generic and relate to accepted behavior in
- 163 online posts while others may be more specific to the context.¹⁶ Examples of points to include are:
- Being kind and respectful within the community to help foster a friendly and sharing
 atmosphere.
- Adhering to widely accepted 'netiquette' (internet good behavior) e.g., avoid 'flaming' (insulting
 comments), 'shouting' (using all capital letters), etc.
- Checking copyright before posting documents e.g., papers, images, etc.
- Before using information posted by other members, gaining permission and acknowledging
 authorship as appropriate.
- Contacting the administrative team with questions or concern about activities within the CoP.
- Administrative team reserving the right to moderate posts and discussions.
- Writing with clarity and avoiding jargon, etc. to facilitate all members reading posts (especially
 for international CoPs when some members will not have English as a first language).
- Advertising and potential commercial use of the site: clarifying what members are or are not
 allowed to post.
- 177 Drawing attention to house rules in the membership acceptance message is recommended.
- 178 Another useful section is FAQs. It is often pre-populated with questions and answers related to the
- 179 purpose of the CoP and how to use the discussion forums, manage your account and contact the

administration team, and will link to other relevant sections. The FAQs are likely to expand over timeand are a useful way to address common questions that arise.

182 4. Choose the online platform

183 The choice of the online platform will depend on the structure and functionalities that need to be supported (as defined in 3 above) and whether the requirements can be met by a platform's 184 185 available template/s. Some have limited customization e.g. Facebook, while others allow more 186 control over the layout which may be preferred e.g., WordPress. The skills required to set up and run 187 a more customizable platform may be beyond those of the team and need to be outsourced. If the 188 COP is within an organization e.g., a university, the virtual learning environment may support the 189 required functions (through in-built discussion boards, wikis, file sharing etc.). However, that option 190 may not be suitable if the community is expected to extend beyond that organization i.e., requiring 191 external membership and access. The platform's ease of use, for both administrators and members, is an important consideration as it can affect engagement and the overall effectiveness of a CoP.³¹ 192 One of the benefits of an online CoP is the repository of information that is built over time,¹⁷ but the 193 194 associated server space required may have an additional cost. Some hosting services provide 'free' 195 storage but may own the data (or information) that users generate on that platform. The CoP may 196 also need a domain name for the website, which involves finding a suitable name and registering it. 197 There will be an associated initial and ongoing monthly cost to maintain the platform, which can 198 range from \$10-20, or more if a lot of server space is required. RUNNING THE ONLINE COP

199 5. Start and grow the community membership

The members are at the core of any CoP, and part of its success will depend on recruitment and ongoing growth of the community. Various approaches can be used; initially the administrative team can reach out to people known to be interested in the topic and should publicize the new community via relevant networks, which may be in person e.g., at conferences, or online e.g., via listservs, internal to an organization, national, international, or professional depending on the CoP's context. Further growth often follows a snowballing effect where existing members help to spread the word and recruit more members.

207 6. Encourage activity

Encouraging activity within the discussion forums is essential for members to start topics and for others to post replies.¹⁶ Members of a CoP mostly fall into the category of 'lurkers',³² who will read posts but do not add to discussions. Newcomers to a CoP often sit at the periphery but as they gain 'mastery' of a subject may choose to participate more and move towards the center, becoming involved in discussions.^{6,7} The administrative team can have a role in encouraging participation by

starting a topic, responding to a post, or stimulating activity by contacting other community 213 214 members known to have relevant expertise and asking them to add to the discussion. Members are 215 more likely to share knowledge in the CoP once they feel the information will not be misused (for 216 example to advance a personal agenda at the expense of other members).⁹ Additionally, when 217 members trust the CoP as a source of reliable information, they will be more willing to engage.⁹ An 218 important characteristic of administrators is to model a culture of trust in their own online 219 activities.^{10,33} Administrators can inadvertently close a discussion as they may be seen as having the 220 final 'say' or being the authority on the topic. Sometimes the CoP goes quiet for a period, it can 221 seem as if a post has been 'lost in the ether' when no one replies. At such times, alternative activities 222 such as sending out a community-wide newsletter, highlighting recent interesting discussions or 223 setting up a poll for members to vote on a topic, can provide an easy way to re-engage. It is 224 acknowledged that time for engagement can be a challenge, but due to the asynchronous nature of 225 online CoPs, members have the flexibility to participate in the discussions when it is most convenient 226 for them.

227 7. Create and share resources

In addition to the information shared within the discussion forums, a community will often find
other ways to share resources and knowledge and create artifacts. In an academic context, examples
might be a repository of shareable teaching materials and a bibliography of relevant journal papers.
Consideration needs to be given to how and where the materials will be stored, adherence to
copyright regulations, and how members will be able to easily search for and find what they are
interested in. Options include using a page on the platform, a membership-based (login) repository,
or a publicly accessible spreadsheet that indexes the resources e.g., a Google sheet.

Some CoPs will also provide extra activities for the community members. For example, online
webinars with presentations from experts in the field (from within or beyond the CoP) and sessions
that showcase innovative work or research studies undertaken by CoP members. Other ways to
support the community's needs include online workshops and mentoring schemes.

239 8. Sustainability

240 One of the challenges can be ensuring the sustainability of the CoP. This involves keeping it fresh,

active, and relevant, and adapting to the ongoing needs of the community. This is important as some

242 CoPs have a limited lifespan, for example when coming together to solve a particular problem or

243 achieve a specific short-term goal.³⁴ The long-term success of a CoP depends on the continued

244 development of the membership's knowledge base and skills, and retaining and expanding the

8

- 245 membership.⁴ There are various approaches the administrative team can consider.¹⁷ Examples
 246 include:
- Communicate the CoP's successes, such as membership number milestones and the knowledge
 and resources generated by the community, as these are effectively achievements of the CoP
 and its members.
- Gather feedback from the community e.g., via a survey, to identify what is valued by members,
- new topics to explore, whether other activities would be of interest and should be provided, and
- if there are any issues preventing engagement with the community's activities.
- Continue to recruit new members as they will bring new ideas.
- Continue to publicize the community through networks and at conferences.
- Consider offering 'treats' from time to time such as a keynote speaker via a webinar.

256 AN EXAMPLE: VETERINARY CLINICAL SKILLS + SIMULATION

257 'Veterinary Clinical Skills + Simulation'^a is an online CoP for veterinary educators who are involved in

- veterinary clinical skills education, teaching, assessment and developing learning resources including
- 259 models (Figure 2). Within the CoP, members can share knowledge, tips and ideas, ask questions,
- 260 discuss challenges and promote collaborative activities. The CoP aligns with Wenger's structural
- 261 elements (Table 1) having a defined area of interest (domain) around which the membership forms

262 (community) and engages in relevant activities (practice).⁵

- About here Figure 2: The Veterinary Clinical Skills + Simulation online community of practice
 homepage
- About here Table 1: Alignment of the Veterinary Clinical Skills + Simulation online group with the
 Wenger's structural elements of a community of practice (CoP)⁵
- In 2019, a small team (authors SB, TK and NF), who had previously been involved in an online CoP
 project (NOVICE)^{26,27} began to plan a specific CoP for clinical skills enthusiasts, as the NOVICE
- 269 software platform that had supported a similar group was about to become obsolete. After
- 270 reviewing various existing online CoPs and software options, WordPress^b and its plugin for forums
- 271 (bbPress) were chosen as the best option for the CoP's requirements, and a hosting package and
- 272 domain name^a were selected. The CoP is free to members and hosting costs are supported by a
- small annual private charitable donation. The features provided within the platform include a
- 274 publicly accessible 'about' page with an overview of the community's aims, house rules and a link to
- a 'contact us' form; membership application (with an approval process to check the individual's
- eligibility e.g., using institutional websites and search engines); a frequently asked questions ('FAQs')
- 277 page; and forums where members can initiate and reply to posts. The online platform was launched

in May 2020, which coincided with the COVID-19 pandemic and, although not intentionally timed,
allowed people to continue to come together as a community at a time when conferences and other
in-person meetings were cancelled. The administrative team was expanded to six in June 2020 (coauthors PS, RP and HJ) and to eight in February 2022 (co-authors JR and EM).

282 Within two and a half years the community has grown to over 600 members representing nearly 100 283 universities and colleges from over 40 countries across the world, and the community continues to 284 grow with 32 new members joining in the first two months of 2023. There are eight forums including 285 topics focused on clinical skills models, online teaching, assessment, conferences and events, and 286 educational research; the latter was added upon request in February 2022 and has generated new 287 activity and ways for members to collaborate. There is regular activity with an average of seven 288 posts per week. Posts typically start with someone asking a question e.g., about making or buying a 289 model, which is followed by other community members providing tips and advice. The posts have 290 demonstrated the community's kindness, support for others and willingness to share expertise. The 291 forums are also used to announce upcoming conferences and advertise jobs within the veterinary or 292 the broader health professions education sector. There has been a reasonable level of engagement 293 with a third (33%) of members having written posts. In other CoPs it is more typical for most members to 'lurk' and remain on the periphery,^{6,7,32} and some CoPs have reported levels of 294 295 participation in large communities as low <1%.⁷ The clinical skills CoP may have benefitted from the 296 overall increase in members' technical and online skills seen across higher education as a result of 297 the COVID-19 pandemic.³⁵

298 As an added extra for the community, regular free webinars have been offered since July 2020. 299 These typically last for one hour with either multiple short talks e.g., how to make a model, or 300 slightly longer talks on other clinical skills education topics e.g., online teaching, assessment, and 301 research studies. Time is always allocated for questions and discussion. There have been over 60 302 talks with attendance averaging around 50 members, although there have occasionally been nearly 303 100 attendees. Another popular offering has been online workshops using breakout rooms for group 304 tasks and discussion; workshops are typically limited to 25 participants. Members join from many 305 time zones (from the west coast of North America to New Zealand) and the slides and audio 306 recordings are shared on the platform afterwards. An additional benefit has been the creation of online repositories of resources including videos for teaching clinical skills³⁶ and a bibliography of 307 journal papers relevant to veterinary clinical skills.³⁷ 308

309 In summary, the team's reflections and top tips are:

Build a team who have a passion for the topic; it makes the time commitment less burdensome
 and involvement more enjoyable.

10

- Proactively manage membership; set up a verification process, have clear email messages
 including an initial welcome with information about getting started and using the site.
- Find ways to minimize team workload e.g., automate as much as possible, update FAQs to
 answer common member queries.
- Do not worry if the community goes quiet for a period. The silence is often broken by a flurry of
 activity! But have a few topics in reserve ready to post to stimulate activity when required.

318 CONCLUSION

- Setting up and running online CoPs is not a trivial undertaking and involves a commitment from the administrative team, mostly behind the scenes, and a community willing to engage; it does not just happen. Careful planning followed by strategic activities help to sustain membership growth and encourage discussion, and the ongoing generation of a relevant body of knowledge. Veterinary
- 323 clinical skills educators have demonstrated that when a group of individuals strongly identify around
- 324 a domain, an online CoP with a truly international membership can be built to support knowledge
- 325 sharing and problem solving. Encouragingly, the members continue to be willing to actively
- 326 contribute and provide tips and advice while further expanding the community's knowledge base
- 327 and resources.

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- 333 NOTES
- a. Veterinary Clinical Skills + Simulation: https://www.clinicalskillsandsimulation.com/
- b. WordPress: https://en-gb.wordpress.org/

336 **REFERENCES**

- Lave J, Situating Learning in Communities of Practice. In Perspectives on Socially Shared
 Cognition: Washington: American Psychological Association, 1991:63-82.
- 2. Wenger E. 2010. 'Communities of Practice and Social Learning Systems: the Career of a Concept'.
- 340 In: Blackmore, C. (ed.), Social Learning Systems and Communities of Practice. The Open
- 341 University.

- 342 3. Wenger-Trayner E, Wenger-Trayner B. Learning to Make a Difference: Value Creation in Social
- 343 Learning Spaces. Cambridge: Cambridge University Press, 2020:5-11.
- 344 https://doi:10.1017/9781108677431
- Wenger EC, Snyder WM. Communities of Practice: The Organizational Frontier. Harvard Business
 Review. 2000;78(1):139-145.
- Wenger E, McDermott R, Snyder W. Cultivating Communities of Practice: A Guide to Managing
 Knowledge. Cambridge, MA:Harvard Business School Press; 2002.
- Lave J, Wenger E. Legitimate Peripheral Participation. In Situated Learning: Cambridge:
 Cambridge University Press, 1991:27-44.
- 351 7. Muller M. Lurking as a personal trait or situational disposition? Lurking and contributing in
- 352 enterprise social media. Proceedings of the ACM 2012 Conference on Computer Supported

353 Cooperative Work. 2012;253–6. <u>https://doi.org/10.1145/2145204.2145245</u>

- 8. Muller M, Ehrlich K, Matthews T, Pere A, Ronen I, Guy I. Diversity among enterprise online
- communities: collaborating, teaming and innovating through social media. Proceedings of the
 SIGCHI Conference on Human Factors in Computing Systems. 2012;2815-24.
- 357 <u>https://doi.org/10.1145/2207676.2208685</u>
- Ardichvili A, Page V, Wentling T. Motivation and barriers to participation in virtual knowledge sharing communities of practice. J Knowl Manag. 2003;7(1):64-77.
- 360 10. Preece J. Etiquette, empathy and trust in communities of practice: Stepping-stones to social
 361 capital. J. Univers. Comput. Sci. 2004;10(3):294-302.
- 11. Barnett S, Jones SC, Bennett S, Iverson D, Bonney A. General practice training and virtual
- 363 communities of practice -a review of the literature. BMC Fam Pract. 2012;13:87.
- 364 <u>https://doi.org/10.1186/1471-2296-13-87</u>
- 12. Thoma B, Brazil V, Spurr J, Palaganas J, Eppick W, Grant V, Cheng A. Establishing a virtual
- 366 community of practice in simulation. The value of social media. Simul Healthc. 2018;13(2):124-
- 367 30. <u>https://doi.org/10.1097/SIH.00000000000284</u>
- 368 13. Steinert Y. Faculty development: From workshops to communities of practice. Med Teach.
- 369 2010;32(5):425-8. <u>https://doi.org/10.3109/01421591003677897</u>
- 14. Coutinho CP, Lisbôa E.S. Social networks as spaces for informal teacher professional
- development: challenges and opportunities. Int J Web Based Communities. 2013;9(2),199-211
- 372 <u>https://doi.org/10.1504/ijwbc.2013.053244</u>
- 15. Tseng F-C, Kuo F-Y. A study of social participation and knowledge sharing in the teachers' online
- professional community of practice. Comput Educ J. 2014;72:37-47.
- 375 <u>https://doi.org/10.1016/j.compedu.2013.10.005</u>

- 376 16. Macià M, García I. Informal online communities and networks as a source of teacher
- 377 professional development: a review. Teach Teach Educ. 2016;55:291-307.
- 378 <u>https://doi.org/10.1016/j.tate.2016.01.021</u>
- 17. de Carvalho-Filho MA, Tio RA, Steinert Y. Twelve tips for implementing a community of practice
 for faculty development. Med Teach. 2020;42(2):143-149.
- 381 https://doi.org/10.1080/0142159X.2018.1552782
- 18. Cruess RL, Cruess SR, Steinert Y. Medicine as a Community of Practice: Implications for Medical
 Education. Acad Med. 2018;93(2):185-91. <u>https://doi.org/10.1097/ACM.00000000001826</u>
- 19. Dong C, Cheema M, Samarasekera D, Rajaratnam V. Using LinkedIn for continuing community of
 practice among hand surgeons worldwide. J Contin Educ Health Prof. 2015;35(3):185-91.
- 386 <u>https://doi.org/10.1002/chp.21300</u>
- 387 20. Gilbert S. Learning in a Twitter-based community of practice: an exploration of knowledge
 388 exchange as a motivation for participation in #hcsmca. Inf Commun Soc. 2016;19(9):1214-32,
- 389 https://doi.org/10.1080/1369118X.2016.1186715
- 21. Isaacson K, Looman WS. Strategies for developing family nursing communities of practice
 through social media. J Fam Nurs. 2017;23(1):73-89.
- 392 <u>https://doi.org/10.1177/1074840716689078</u>
- 393 22. Guénette L, Maheu A, Vanier MC, Dugré N, Rouleau L, Roy-Petit J, Lalonde L. Pharmacists
- practising in family medicine groups: An evaluation 2 years after experiencing a virtual
 community of practice. Can Pharm J (Ott). 2021;155(1):39-49.
- 396 <u>https://doi.org/10.1177/17151635211049235</u>
- 397 23. Thomas AU, Fried GP, Johnson P, Stilwell BJ. Sharing best practices through online communities
 398 of practice: a case study. Hum Resour Health. 2010;12(8):25. <u>https://doi.org/10.1186/1478-</u>
- <u>4491-8-25</u>
- 24. Dzara K, Kelleher A, Ramani S. Fostering educator identity through social media. Clin Teach.
 2021;18(6):607-13. <u>https://doi.org/10.1111/tct.13414</u>
- 402 25. Moore JL, Bjørkli C, Havdahl RT, Lømo LL, Midthaug M, Skjuve M, Klokkerud M, Nordvik JE. A
- 403 qualitative study exploring contributors to the success of a community of practice in
- 404 rehabilitation. BMC Med Educ. 2021;21(1):282. <u>https://doi.org/10.1186/s12909-021-02711-x</u>
- 405 26. Baillie S, Kinnison T, Forrest, N., Dale V, Ehlers J, Koch M, Mándoki M, Ciobotaru E, de Groot E,
- 406 Boerboom TBB, van Beukelen P. Developing an online professional network for veterinary
- 407 education: the NOVICE project. J Vet Med Educ, 2011;38(3):319-27.
- 408 <u>https://doi.org/10.3138/jvme.38.4.395</u>

- 409 27. Dale VHM, Kinnison T, Short N, May SA, Baillie S. Web 2.0 and the veterinary profession: current
- 410 trends and future implications for lifelong learning. Vet Rec. 2011;169(18):467.

411 <u>https://doi.org/10.1136/vr.d4897</u>

- 412 28. Whiting M, Kinnison T, Mossop L. Developing an intercollegiate Twitter forum to improve
- student exam study and digital professionalism. J Vet Med Educ. 2016;43(3):282-6.
- 414 <u>https://doi.org/10.3138/jvme.0715-114R</u>
- 29. Baillie S, Rhind S, MacKay J, Murray L, Mossop L. The VetEd Conference: Evolution of an
 Educational Community of Practice. J Vet Med Edu. 2022;49(4):414-22.
- 417 https://doi.org/10.3138/jvme-2020-0154
- 418 30. Cullen ALL, Kairam SR. Practicing Moderation: Community Moderation as Reflective Practice.
- 419 Proc. ACM Hum Comput Interact. 2022;6(CSCW1):1-32. <u>https://doi.org/10.1145/3512958</u>
- 420 31. Peñarroja V, Sánchez J, Gamero N, Orengo V, Zornoza AM. The influence of organisational
- 421 facilitating conditions and technology acceptance factors on the effectiveness of virtual
- 422 communities of practice. Behav Inf Technol. 2019;38(8):845-57.
- 423 https://doi.org/10.1080/0144929X.2018.1564070
- 424 32. Neelen M, Fetter S. Lurking: a challenge or a fruitful strategy? A comparison between lurkers and
- 425 active participants in an online corporate community of practice. Int. J. Knowledge and Learning.
- 426 2011;6(4):269-84. <u>https://doi.org/10.1504/IJKL.2010.038649</u>
- 33. Booth SE. Cultivating knowledge sharing and trust in online communities for educators. J Educ
 Comput Res. 2012;47(1), 1–31. <u>https://doi.org/10.2190/EC.47.1.a</u>
- 429 34. Bolisani E, Fedeli M, Bierema L, De Marchi V. United we adapt: communities of practice to face
- 430 the CoronaVirus crisis in higher education. Knowl Manag Res Pract. 2021;19(4):454-8,
 431 https://doi.org/10.1080/14778238.2020.1851615
- 432 35. Myyry L, Kallunki V, Katajavuori N, Repo S, Tuononen T, Anttila H, Kinnunen P, Haarala-Muhonen
- 433 A, Pyörälä E. COVID-19 accelerating academic teachers' digital competence in distance teaching.
- 434 Front Educ. 2022;7:770094. <u>https://doi.org/10.3389/feduc.2022.770094</u>
- 435 36. Veterinary Clinical Skills Videos & Other Useful Resources <u>https://tinyurl.com/yr7btwk9</u>
- 436 Accessed 23rd February 2023
- 437 37. Vet Ed Research Resource Repository <u>https://tinyurl.com/2p8zcwks</u> Accessed 23rd February
- 438 2023

439 Table 1: Alignment of the Veterinary Clinical Skills + Simulation online group with the Wenger's

Structural elements of a CoP	Description for the 'Veterinary Clinical Skills + Simulation' CoP
Domain - overarching area of interest and knowledge	Area of interest: teaching, learning and assessing veterinary clinical skills, including developing models and simulations
Community - the membership coming together around the area of interest	The community: 'Veterinary Clinical Skills & Simulation' group; members are veterinary educators involved in any aspect of veterinary clinical skills teaching
Practice – activities that build the knowledge within the CoP	The group's activities: sharing tips and ideas for teaching, learning and assessing clinical skills; discussing challenges and trying to identify solutions; finding ways to collaborate and work together

440 structural elements of a community of practice (CoP)⁵

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