sciendo 6

Research Article

Pádraig Ó Beaglaoich*, Yvonne Crotty

'Meitheal Múinteoirí': Planning for an Online Community of Practice (OCoP) with post-primary teachers in the Irish-medium (L1) sector

https://doi.org/10.2478/ijtr-2020-0002 received 30 August, 2020; accepted 15 October, 2020

Abstract: This paper will set out the key planning considerations regarding the establishment of a dedicated online portal for Gaeltacht and Irish-medium schools at post-primary level as detailed in the Policy on Gaeltacht Education 2017-2022 (PGE). The research topic is intrinsically linked with action points highlighted within strategy and policy papers concerning the improvement of online supports for teachers in recent years by the Department of Education (DE) in Ireland. The Digital Strategy for Schools 2015-2020 refers to the objective of establishing digital communities of practice and the PGE highlights the need for a 'dedicated online portal' for Irish-medium schools. Embracing a problem-solving spirit, forging coalitions, building inter-agency collaboration, and ensuring teacher buy-in from the outset are all critical factors in the necessary planning process. Through the adoption of a mixed-methods approach, questionnaire and focus group respondents verified the most important thematic issues for L1 (Irish-medium) post-primary teachers respecting the establishment of what has the capacity to become a flourishing online community of practice (OCoP). The research process cast a spotlight upon how best to serve the teachers' professional needs, confirmed the need for a collaborative approach that prioritised the significance of the collective, ascertained the existence of greater teacher openness to systemic change, and the centrality of transformative digital solutions in the L1 educational sphere.

Yvonne Crotty, School of STEM Education, Innovation and Global Studies, DCU Institute of Education, Dublin City University, St. Patrick's Campus, Drumcondra, Dublin 9. Ireland

Keywords: Gaeltacht; Irish-medium schools; Collaboration; Planning; Change; Transformative; Online community of practice

1 Introduction

Existing challenges for teachers in L1 (Irish-medium) schools are the distinct disadvantages they experience and perceive in terms of textbooks, teaching resources and technological provision by contrast with the more prominent L2 sector (English-medium schools) in Ireland. L1 post-primary subject teachers have frequently expressed through various fora, for example, their subject associations, that they would benefit in the long-term from an online mechanism to share best practice and resources in a collegial manner. Despite the existence of various systemic avenues of support in addition to significant improvements in the levels of assistance in recent decades, the sector has lacked one distinct portal that provides for all subject teachers in the one focal point online. Such a development in terms of its scalability would be innovative, transformative, and pioneering.

The action points within the PGE are not explicit in terms of the necessary planning steps involved and how the best conditions for success might be brought about. This is a critical factor as failure to plan accordingly from the outset can ultimately lead to failure of such ventures. Handy (2015) illuminated the importance of allowing for the required time and space for innovations to prosper and grow - the establishment of an OCoP for the L1 sector is one such instance where time and space to flourish is a necessity. If such a development were to blossom, the most important beneficiaries would be subject teachers at post-primary level in the L1 sector, newly qualified teachers (NQTs) entering the L1 teaching profession for the first time, and indeed teachers moving from L2 schools to L1 schools. The researchers envisage the portal's long-term objective as the assuaging of current problems and those

^{*}Corresponding author: Pádraig Ó Beaglaoich, Oifigeach Oideachais (Iar-bhunscolaíocht), An Chomhairle um Oideachas Gaeltachta agus Gaelscolaíochta (COGG), 23 Windsor Place, Dublin 2, Email: padraig@cogg.ie

of new entrants to the profession. The vision for this project is an anywhere anytime online co-learning space for L1 teachers that could potentially lead to accessing a rich suite of resources, extending subject knowledge, engaging in professional dialogue and online CPD, receiving collegial support/advice and ensuring equity of provision.

Firstly, the 2-stage mixed methods approach adopted will be presented alongside a selection of teacher assertions which point to their views on OCoP establishment being aligned with much of the commentary in the existing literature. Secondly, the subject of Online Communities of Practice (OCoPs) will be introduced alongside a definition of its defining characteristics. Although sharing some similarities with face-to-face Communities of Practice (CoPs), there are distinct differences that will be discussed, with a focus on the significant importance of vision and purpose and variations in terms of operationalisation. OCoPs that fail to provide value for users and are lacking in terms of leadership tend to be short-lived and these areas will be explored. Furthermore, the elemental importance of trust-building, reputational reliability and cultivating a sense of belonging will be illuminated. In conclusion, the positive early transformative indicators and the bright portents for future success will be referenced alongside some recent evidence of significant progress. This paper should be of interest to those working in the field of education and training management intending to plan a pathway for building an OCoP for teachers and professionals working in the education sector.

2 Methodology

The researchers chose to adopt a mixed-methods approach to the research question at hand, which incorporated an online questionnaire at the first phase of the study, followed by an online focus group interview. Availing of this two-pronged process provided a greater depth of views and observations than the sole independent use of quantitative or qualitative methods (Creswell, 2012). Given the multi-faceted and emotive nature of the research topic allied with the centrality of teachers' input, the researchers felt the breadth of opinion and scale of complexity involved could not have been adequately captured through the employment of one methodology (Johnson et al., 2007).

The first step on the research journey entailed the circulation of an online questionnaire via Google Forms to 20 post-primary L1 teachers to assess the respondents'

views regarding four primary pillars: **1.** Professional, linguistic and geographical background, **2.** ICT and linguistic proficiency, **3.** Previous experience of online communities of practice, and **4.** Teacher expectations for an OCoP serving subject-specific L1 teachers. Purposive sampling was employed at this stage of the research to ensure that the respondents were representative of an equitable cross-section of the L1 post-primary teaching community in terms of gender, subject area, geographical location, and linguistic proficiency. The results garnered from this phase fed into the identification of key lines of questioning for the focus group component and cast a spotlight on many of the same thematic areas that continually arise in the literature on CoP/OCoP foundation.

The most prominent topics arising from the online questionnaire (phase 1) were extrapolated from the data, highlighted, collated and coded in a visual manner utilising virtual post-its through the visual collaborative software www.miro.com (Figure 1). It was clear that all the initial topics captured could not be discussed individually within the limited timeframe assigned to the online focus group process. This reality necessitated further analysis and investigation. Adopting a repeated familiarisation technique and iterative process, the data was pooled into the 8 most salient categories. The final layers of analysis illuminated these categories as aligned with the 5 developmental stages of OCoPs presented by the Ministry of Education, New Zealand (2006). The six-phase model of thematic analysis (Maguire & Delahunt, 2017) was elemental in deciphering this process and resulted in simple workable themes in the facilitation of the online focus group process: (a) familiarisation, (b) coding, (c) gen-



Figure 1: Prominent topics from questionnaire respondents on OCoP establishment

erating themes, (d) reviewing themes, (e) defining and naming themes, and (f) writing up.

A categorisation of the eight most salient areas from questionnaire responses

- Building momentum and awareness
- Vision, strategy, and moderation
- Leadership factor chief drivers
- Cultivating collegiality and reciprocity
- Architectural design and ease of use/access
- Systemic support and sustainability concerns
- Participatory recognition and time factor
- Training opportunities and ongoing support

Building upon the early analysis, these eight categories were condensed into 5 thematic areas, which upon detailed examination were seen to align with the identified developmental stages of establishing OCoPs (Ministry for Education NZ, 2006): 1. Identification / 2. Design / 3. Testing / 4. Roll-out / 5. Growth. All the focus group questions were formulated based on the valuable informative thematic data gathered in the initial stage of the mixed-methods approach and asked sequentially as detailed below (Figure 2).

3 Focus Group Process

Four focus group interviewees were selected from respondents who completed the online questionnaire. Varying theories exist surrounding the recommended numbers of focus group participants, whereby the advice can be anywhere ranging from four to fifteen people (Ochieng et

al., 2018). This was done by way of convenience sampling insofar as the teachers invited to participate were professionally identifiable through their levels of activity in the respective subject fields. A degree of proficiency concerning ICT, involvement in relevant subject association(s), and some level of pre-existing activity in the field of professional learning activity were desirable. The teachers engaged in the discussion were representative of the various types of schools, encompassing Gaeltacht schools and Gaelcholáistí (schools outside the Gaeltacht boundaries), and captured opinions from teachers with varying years of service, background and subject areas - Gaeilge, Physical Education, Business, Science and Material Technology/Woodwork. The interviews were conducted over the course of an hour and a half via an encrypted and password-protected Zoom account. The interviewees' faces were always visible on-screen, and the researcher ensured that all participants were allocated equal amounts of time to voice their opinions. Due cognisance was given to the critical importance of objectivity and confidentiality.

The opinions expressed by the focus group respondents very much aligned with the theories and assertions opined in academic writing concerning effective and sustainable planning for OCoPs. Questions were asked in parallel with the five broad thematic stages of OCoPs that came to the fore during phase 1 of the research process. Interestingly, participant teachers equally shared the contention that drawing from a pre-existing co-located CoP would contribute positively to the propensity of future OCoP success. A commonly shared sentiment was the need for a fusion of offline and online input for example, in the guise of an initial face-to-face meeting before moving online, and a proposed annual/bi-annual resource-sharing and/or networking day. Although the teachers recognised that most of the activity would happen online, they

Theme 1: Identification stage - identify the audience, purpose, goals and vision of OCoP?

Theme 2: Design stage - activities, technologies, collaborative processes and roles to support OCoP?

Theme 3: Testing stage - road testing, subject ambassadors (champions/change agents), strategy assessment, establish a working framework for OCoP?

Theme 4: Roll-out stage - onboarding and roll-out to the broader community, set timeframes for development and levels of engagement?

Theme 5: Growth stage - sustaining collaboration and knowledge-sharing, increasing participation and contributions, goal setting, networking?

Figure 2: Focus group discussion themes derived from online questionnaire data

acknowledged the human element was a vital ingredient in the trust-building process. The focus group participants opined that one driving organisation, one focal point, a code of practice and ease of use were all necessities in the development of an OCoP for the L1 sector – some of these activities are already happening online in various shapes and forms, for example via Twitter, Facebook closed groups, Microsoft Teams and Dropbox, but a strategic streamlined approach that brings L1 teachers together in one central place was a space that teachers identified as an area for expansion if a transformative change is to be fully realised.

3.1 Desired Design

The constituent parts of an OCoP for L1 teachers and what would be desirable from a design perspective resulted in some interesting and definitive observations during the focus group process (Figure 3). All focus group participants felt a full-time coordinator needed to be assigned to fulfil the developmental, planning, administrative and training needs of such a venture - such a move would ensure the continuity and regularity that has been missing regarding teacher-driven OCoP activity in recent decades. Teachers are already overburdened with initiative overload within their day-to-day teaching duties and it was conveyed that subject-specific teachers simply do not possess the necessary time to drive a venture of this enormity from within. The support of the Department of Education and agencies like An Chomhairle um Oideachas Gaeltachta agus Gaelscolaíochta (COGG), the Professional Development Service for Teachers: Technology in Education (PDST TiE) and Scoilnet (Department of Education's official portal for Irish education) was viewed as paramount to the OCoP realising its transformational capability. Good moder-



Figure 3: Primary assertions voiced by focus group participants

ation and strong leadership are characteristic traits of successful OCoPs, and these key components were also highlighted by the focus group participants. In addition to that, the vital importance of subject agents/ambassadors as part of the leadership structure was highlighted alongside the wisdom of identifying upward to three teachers in each subject area. Movement and growth are natural progressions in any community and depending solely on one subject-specific agent was considered by participant teachers a risk factor that should be avoided.

Online focus group participants were categoric in their assertion that the professional value and benefit of engaging with the OCoP must be very clear to L1 teachers from the outset and would require robust publicity, awareness-raising and recruiting campaigns. They also relayed the importance of operational simplicity thus ensuring engagement from L1 teachers at varying trajectories and levels of ICT proficiency. It was acknowledged that some schools are far ahead of others in terms of ICT investment, implementation, and training. This digital divide is an issue that will need to be addressed. If teachers are to benefit from shared knowledge, embrace a spirit of reciprocity and engage collaboratively in professional learning, it was the strongly held view of all focus group participants that the functionality of an advisory/discussion forum should be provided within the OCoP. Finally, there was a clear recognition of the following necessities: embracing openness, continuously reflecting and re-adapting, accepting constructive criticism and being amenable to mid-stream changes. One idea mooted during the focus group process and worthy of further exploration is the proposal that a named teacher within every L1 school could fulfil a representative management role (like commonly held 'A' posts), whereby they would act as the point of contact for the OCoP coordinator and disseminate relevant information to staff regularly. This prospect also lends itself to the possibility of forming an OCoP advisory group (6 – 8 L1 teachers) that would provide an ongoing feedback loop and ensure that teachers could highlight issues requiring attention as and when they may arise.

4 Online Communities of Practice

Etienne Wenger is globally regarded as one of the chief thought leaders in the area of CoPs for several decades and has built upon Vygotsky's earlier theories of social constructivism to reach an understanding whereby CoP theory is built on the principles of collective learning and the social construction of knowledge. CoPs tend to have a

greater appeal when they respond to a problem or issue – in this context Kimble and Hildreth's definition (2004) is noteworthy: "a group of professionals informally bound to one another through exposure to a common class of problems, common pursuit of solutions, and thereby themselves embodying a store of knowledge" (2004, p.3). There are some definitional challenges in the context of CoPs given the breadth of existing literature, but for this paper, Wenger, McDermott & Snyder (2002) best capture the essence of what CoPs constitute: "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (2002, p.7). An OCoP is an extension of this, with the added technological factors an added driving force for sustainable development. Rosenberg (2004) added further weight to the assertions of Wenger et al. (2002) when he concluded that online communities of practice offer opportunities for working with and learning from others who share similar interests and needs.

The most prudent starting point for any OCoP is defining the strategic community vision and focus - only then can the prospective members share in the building of such a community (Attebury et al., 2013). In the early formation stage, it is essential to determine a shared vision that can be easily articulated. This is crucial in the identification of the potential community, its end goal, and is a springboard for the first stage in the OCoP planning process (Wenger et al., 2002). OCoPs can add value when planned effectively in a manner that maps out its intended objectives (Booth, 2012). Terehoff (2002) shone a light upon the andragogical underpinnings regarding teacher professional learning and the importance of onboarding teachers from the earliest juncture in collaborative projects pertaining to their profession. Cognisant of this fact and given this venture will be teacher-focused, it was understood that partnering with and receiving the ongoing support and guidance of L1 subject teachers was critical to this future enterprise and its long-term sustainability. The questionnaire phase of the research process indicated a clear appetite regarding the worthiness of establishing an OCoP for L1 subject teachers (Figure 4).

4.1 Co-located CoPs vs Online CoPs

A community of practice in the traditional sense is generally recognised as an in-person face-to-face collective of learners with a joint enterprise, mutual engagement, and shared repertoire (Wenger, 1998). However, in the case of an OCoP, computer-mediated communication (CMC),



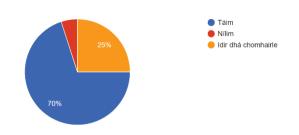


Figure 4: 70% of respondents expressed that an OCoP for L1 postprimary teachers would be worthwhile

adaptive technology and the employment of the Internet are elemental in its evolution. Although in the minority, there are researchers who posit that OCoPs are not possible. Thorpe (2009) asserts that online interaction cannot achieve the same level of shared experience as that which can be produced through face-to-face contact but also recognises that OCoPs can create new avenues for learning that would not exist without the employment of CMC. Wenger (2009) contends that technology offers significant potential in the realm of CoPs. Barab et al. (2004) claim that OCoPs possess all the challenges of co-located/ co-present CoPs but have the added challenges of navigating technologies and planning for their use. It is widely acknowledged that inherent complexities exist concerning the operational roll-out of OCoPs. Nevertheless, these are barriers that can be overcome and OCoPs can grow successfully if established, designed, and supported in the right manner (ibid.).

Certainly, whilst many parallels can be drawn between OCoPs and CoPs in terms of characteristics, there are experiential, operational, and practicable differences. OCoPs require a greater degree of planning and design than face-to-face CoPs, given that decisions must be made about the adoption and implementation of the most suitable support infrastructure concerning CMC and ICT (ibid.). Dubé et al. (2006) advance several reasons whereby OCoPs and the experience of its members differ from traditional face-to-face CoPs:

- The online environment dictates that the experience varies from co-located CoP
- The level of interactivity, the ways whereby members interact with one another and meaning-making will differ – messages can be misconstrued
- Trust may take longer to establish and needs to be navigated carefully
- Sense of place could be different given the adoption of CMC and remoteness

Lurkers will exist and creating a culture of reciprocity will differ and take time (adapted from Dubé et al., 2006)

Whilst co-located CoPs and OCoPs may differ in structure and delivery, Wenger et al. (2014) illuminate the importance of coordination and leadership roles if a community of practice is to truly thrive for a period of longer duration.

4.2 The Leadership Factor

Successful OCoPs that realise worthwhile sustainable value are characterised by strong effective leadership and good moderation (Booth, 2012). Pinpointing prospective coordinators, assigning leadership roles, and initiating modes of governance is also essential to the viability of an OCoP (Wenger et al., 2002). It must be determined whether the leadership aspect is organisation-driven or member-driven because this is crucial in the designation of roles in early formation. Some concerns voiced in the literature related to it being facile to establish a CoP but far more difficult to sustain it - a lack of leadership and champions at the various stages of growth are decisive factors. The defining of roles, decision-makers and developers allied to the activities and support structures associated with OCoPs demand for the provision of training. Daniel et al. (2004) assert the wisdom of organising a workshop with potential members in the early developmental stages as this would provide the opportunity for face-to-face discussion in determining the future course of the OCoP. The role of leadership is to ensure that value is being created for all the constituent members. In the context of OCoPs, lurkers will always exist and will constitute a significant percentage of the membership, but it is critical to ensure that movement across the different levels is happening and that no one participatory group becomes stagnant.

Stuckey and Smith (2004) and Gairín-Sallan (2010) emphasise the importance of leadership within OCoPs and assert that it is the role of leadership to keep members involved, create opportunities for participation, and prioritise the importance of continually evaluating the needs of the learning community. Wenger et al. (2002) addressed the need to develop new strands of leadership at the sustaining/maturing phase of an OCoP to breathe new life into the community and extend its core group. The importance of appointing a community leader or facilitator cannot be underestimated and is critical to its viability. The cyclical nature of the OCoP life cycle points to the importance of ongoing recruitment in terms of long-term

sustainability. A common misconception is that CoPs are self-organising and bereft of leaders. This is a falsehood because the majority of OCoPs need to be cultivated by some entity and require ongoing stewardship (Wenger, 2009). Falk and Drayton (2015) concur that online professional learning communities cannot prosper without some form of distributed leadership. Other characteristic traits of successful OCoPs are those that inculcate a foundation of trust, that motivate its members to affect change and embody a sense of belonging.

5 Trust, Motivation and Sense of **Belonging**

Trust is recognised as one of the key enablers in driving the growth of OCoPs and building sustainable relationships (Booth, 2012). Ardichvili (2008) calls attention to two varieties of trust as applicable to OCoPs: (a) personal knowledge-based trust and (b) institution-based trust. The former happens as relationships within the OCoPs begin to flourish and the latter is dependent on the institutional/ organisational reputation of the entity leading OCoP coordination. Although trust is regarded as the primary building block upon which OCoP activity is enabled, other aspects that impact on activity and participatory levels are supportive leadership and favourable organisational culture (ibid.) Without the necessary suite of suitable tools and technological supports, members of an OCoP cannot be expected to attain its intended goal(s) (Barab et al., 2004). Figallo (2004) posited that the challenge of gaining and maintaining trust can be a major stumbling block when it comes to engagement with OCoPs but the reputational status of the driving organisation or entity can play a positive role in generating positivity, goodwill and confidence. The following declaration is very pertinent insofar as an OCoP is highly unlikely to gain any collaborative traction without this vital ingredient of trust: "Trust is the lubricant of the collaborative engine." (ibid., p. 316).

Teacher engagement with OCoPs is motivated by seeking out solutions to workplace issues, gaining new knowledge and clarifying questions concerning their practice (Duncan-Howell, 2007). OCoPs allow teachers the flexibility to engage in professional collaborative learning in ways that are not bound by time, geographic location, or years of service (Duncan-Howell, 2010). This anytime anywhere access facilitates the involvement of teachers and various trajectories of participation, and their reasons for membership are both professional development and emotional support (ibid.). Interestingly, Duncan-Howell

(2010) purports that the issue of time (or lack thereof) is reported by teachers as both one of the main motivators and barriers. This is indeed a common thread in the literature – an argument, on the one hand, that OCoPs allows for anytime anywhere access but on the other hand, that initiative overload and burdensome workloads do not allow the necessary time for engagement. Ardichvili (2008) points to motivational considerations from the personal, community and normative perspectives e.g. greater expertise, sense of belonging and collegial support. Chiu et al. (2006), in their commentary on social capital, recognise reciprocity as a key motivator if it can be realised as one of the community norms.

In terms of the long-term sustainability and transformational impact of OCoPs, it is essential to build membership and seek out methods whereby participatory interest can be maintained, harnessed, and fortified. What is it that makes users of online communities engage and commit to staying the course? The answers are quite simple - they must see that it benefits their lives, and they must feel a sense of belonging. We are currently living through the Digital Age, an era where the rapid connection of the online world has disconnected many people in the physical world and turned social systems on their head. The Covid-19 health crisis of 2020 has re-emphasised how important people are as a source of energy and support to one another. Recent upheaval and turbulence in our daily lives have highlighted how a connectedness with our tribe is massively important, a group with which we identify and share values and culture, and that sharing resources are at the very core of good living. Maslow's third tier in his hierarchy of needs model (Figure 5) highlights the

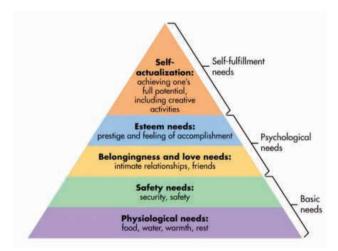


Figure 5: Maslow's 3rd tier points to belongingness (credit: https://www.simplypsychology.org/maslow.html)

human necessity and primal urge for belonging. Longing for support, connection, and shared understanding are central tenets of OCoPs. It must also be recognised that community is both a process and a place – the more we learn and know about the process the better the place will become. The researchers carefully considered this reality when engaging with the research process.

6 Early Transformative Indicators

The measured planning process adopted paid early dividends and led to a shift in both workplace practice and teachers' desires to become involved with this innovative departure. One of the primary transformative indicators is the recent completion of the first phase of a collaborative initiative between COGG, Scoilnet and the Department of Education (Gaeltacht Unit) entitled *An Tairseach* www. cogg.ie/tairseach. This welcome advancement for teachers is a pioneering step for the L1 education sector, a site housing a host (c. 200 resources) of post-primary teaching and learning resources for L1 subject teachers (Gaeilge, Woodwork, Business Studies, Physical Education, Home Economics, Music, and Mathematics) that are easily accessible, downloadable, and editable. These L1 resources are also accessible on www.scoilnet.ie.

All resources are a response to gaps identified by current L1 subject teachers. They have all been developed and designed by teachers for teachers but have also undergone a thorough proofing and quality assurance process. The stated barriers around varying levels of linguistic proficiency have been surmounted by virtue of this pathway. Innovative solutions were sought out in this regard which has led to external collaborative work, and an active contributory approval role with a partnering 3rd level institution. The ongoing development work is being driven by a 3-person team within COGG and has led to online teamwork which is reaping great results. Their application to this work has been transformational insofar as all related workflow, file management/storage, communication and project management tasks are completed through a myriad of technologies, leading to transformative internal work practices that have facilitated huge progress within a short timeframe.

Building upon the research work conducted throughout this study and the professional opinions expressed by teachers in their specialist fields during the questionnaire and focus group process, several suggestions proposed by teachers were incorporated within the initial phase of the project's planning and implementation process: deploy-



Figure 6: First phase completion of L1 teaching and learning resources: www.cogg.ie/tairseach

ment of subject agents to drive change transformation and alter mindsets from within, forging alliances with teacher subject associations, closer collaboration with other stakeholders and support agencies, ease of access and multipoint entries, a clearly defined plan to ensure regularity of updates/activities, and public awareness-raising through social media channels. The completion of the first step in the process (Figure 6) has been very positive - additional teachers are now expressing an interest in becoming involved and the portents for future success look extremely promising. Planning for the second phase of *An Tairseach* is in process and based on feedback from teachers, subject change agents/contributors are currently being recruited in the following subject areas: Geography, History, Mathematics, Home Economics, Physical Education, Engineering, Spanish, Religion and Wellbeing. In collaboration with the relevant subject associations and various support agencies within the Department of Education, the intention is to provide a series of awareness-raising webinars in 2021 and opportunities for teachers to come together online to share best practice and resources. Should the rate of growth continue at the planned pace of implementation, it is envisaged these positive developmental steps will constitute broad-ranging changes that will achieve the aspired transformative impact for L1 subject teachers.

7 Conclusion

At the time of writing, no examples of existing OCoPs fully implemented on a national scale within the post-primary sector (L1 or L2) in Ireland were identified in the literature. Further research on the viability of OCoPs at this level of education would be beneficial - to shed further light on whether such OCoPs can be successfully operationalised on such a broad scale. The dearth of literature around L1 provision and OCoPs in Ireland would also suggest that further research beyond this exploratory study is required. The question of minority languages and the possible role of OCoPs in language revitalisation is also a question worthy of future consideration.

The literature suggests the implementation of teacher OCoPs can provide a springboard for the acquisition of new knowledge and skills, and although it indicates the correlation between the planning/design process and critical success factors, there is a paucity of research detailing the measurability of teacher OCoP effectiveness. Both the literature and opinions expressed by teachers during this research journey point to effective CoPs/OCoPs demanding extensive time, meticulous planning, and in-built flexibility for mid-stream changes. One of the primary factors yet to be ascertained is whether a system-wide OCoP rolled out nationally, with an offering of subject-specific OCoPs within its infrastructure and all the planning this entails, can ultimately succeed. Much work is yet required to prove the validity of such an aspiration. The outlook for the future is very positive and much interest has been expressed by L1 teachers in the initial phases of a dedicated hub for this sector. The need for collaborative transformative change, the adoption of innovative digital solutions, and online collegial activities for subject teachers at L1 post-primary level are ambitious objectives concerning OCoP growth for the L1 sector in Ireland. However, they can be realised through a process of continuous systemic planning, teacher agency and collective buy-in from all stakeholders.

References

- [1] Ardichvili, A. (2008). Learning and knowledge sharing in virtual communities of practice: motivators, barriers, and enablers. Advances in Developing Human Resources, 10(4), 541-554. DOI: https://doi.org/10.1177/1523422308319536
- Attebery, R., Perret, R., Kenyon, J., & Green, D. (2013). Practice makes perfect? A retrospective look at a community of practice. Library Philosophy & Practice. https:// digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2156&context=libphilprac
- Barab, S.A., Kling, R., & Gray, J.H. (Eds.) (2004). Designing for virtual communities in the service of learning. Cambridge: **Cambridge University Press**

- [4] Booth, S. E. (2012). Cultivating knowledge sharing and trust in online communities for educators. *Journal of Educational Computing Research*, 47(1), 1-31. DOI: https://doi.org/10.2190/EC.47.1.a
- [5] Chiu, C.-M., Hsu, M.-H., & Wang, E. T. G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, 42(3), 1872–1888. DOI: https://doi.org/10.1016/j.dss.2006.04.001
- [6] Creswell, J.W. (2012). Educational research: planning, conducting, and evaluating quantitative and qualitative research. Boston: Pearson.
- [7] Daniel, B.K., Sarkar, A., & O'Brien, D. (2004) A participatory design approach for a distributed community of practice in governance and international development. Paper presented at the World Conference on Educational Multimedia, Hypermedia and Telecommunications, Lugano, Switzerland.
- [8] Department of Education and Skills (2015). *Digital*Strategy for Schools 2015-2020, https://www.education.
 ie/en/Publications/Policy-Reports/Digital-Strategy-for-Schools-2015-2020.pdf
- [9] Department of Education and Skills (2016). Policy on Gaeltacht Education 2017-2022 https://www.education.ie/ en/Publications/Policy-Reports/Policy-on-Gaeltacht-Education-2017-2022.pdf
- [10] Dubé, L., Bourhis, A., & Jacob, R. (2006) Towards a typology of virtual communities of practice. *Interdisciplinary Journal* of Information, Knowledge and Management. 1 (1), 69-93. http://www.ijikm.org/Volume1/IJIKMv1p069-093Dube.pdf
- [11] Duncan-Howell, J. (2007). Online communities of practice and their role in professional development of teachers (Doctoral dissertation). Queensland University of Technology, Queensland, Australia. https://core.ac.uk/download/ pdf/10885211.pdf
- [12] Duncan-Howell, J. (2010). Teachers making connections: Online communities as a source of professional learning. British Journal of Educational Technology, 41 (2), 324-340. DOI: https://doi.org/10.1111/j.1467-8535.2009.00953.x
- [13] Falk, J.K., & Drayton, B. (2015) Creating and sustaining online professional learning communities. New York, NY: Teachers College Press.
- [14] Figallo, C. (2004). Trust, identity, reputation, and learning in organizations. In Conner, M. & Clawson, J. (Eds.), Creating a Learning Culture: Strategy, Technology, and Practice (pp. 314-325). Cambridge: Cambridge University Press.
- [15] Gairín-Sallán, J., Rodríguez-Gómez, D., & Armengol-Asparó, C. (2010). Who exactly is the moderator? A consideration of online knowledge management network moderation in educational organisations. *Computers & Education*, 55(1), 304-312. DOI: https://doi.org/10.1016/j.compedu.2010.01.016

- [16] Handy, C. (2015). The second curve: thoughts on reinventing society. London: Random House
- [17] Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112–133. DOI: https://doi.org/10.1177%2F1558689806298224
- [18] Kimble, C., & Hildreth, P. (2004). Communities of practice: Going one step too far?, https://halshs.archives-ouvertes.fr/ halshs-00489632/document
- [19] Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical step-by-step guide for learning and teaching scholars. *The All Ireland Journal of Teaching and Learning*, 1(3), 112–133. p.3351-33514, http://ojs.aishe.org/index.php/aishe-j/article/view/335
- [20] Ministry of Education, New Zealand (2006). Literature review and synthesis: online communities of practice. https://www.educationcounts.govt.nz/__data/assets/pdf_ file/0019/7480/lrs-online-com.pdf
- [21] Ochieng, N.T., Wilson, K., Derrick, C.J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution 9*(1), 20–32. DOI: https://doi.org/10.1111/2041-210X.12860
- [22] Rosenberg, M.J. (2004). The real and appropriate role of technology to create a learning culture. In Conner, M. & Clawson, J. (Eds.), Creating a Learning Culture: Strategy, Technology, and Practice (pp. 186-207). Cambridge: Cambridge University Press.
- [23] Stuckey, B. & Smith, J.D. (2004, March 24-26). Sustaining communities of practice. Paper presented at the International Association for Development of the Information Society (IADIS) Conference, Lisbon, Portugal.
- [24] Terehoff, I. (2002). Elements of adult learning in teacher professional development. NASSP Bulletin, 86(632), 65-77. DOI: https://doi.org/10.1177/019263650208663207
- [25] Thorpe, M. (2009). Technology-mediated learning contexts. In: Edwards, R., Biesta, G., & Thorpe, M. (Eds.), Rethinking Contexts for Learning and Teaching: Communities, Activities and Networks, (pp. 119-132). Abingdon: Routledge
- [26] Wenger, E., McDermott, R., & Snyder, W. (2014). Seven Principles for Cultivating Communities of Practice. https:// www.researchgate.net/publication/265678077
- [27] Wenger, E., White, N., & Smith, J. (2009). Digital habitats: Stewarding technology for communities. Portland, OR: CPSquared.
- [28] Wenger, E., McDermott, R., & Snyder, W. (2002). Cultivating communities of practice: a guide to managing knowledge. NY: Cambridge University Press
- [29] Wenger, E. (1998). *Communities of practice: learning, meaning and identity*. Cambridge: Cambridge University Press