Organizational Aspects of Collaboration on Local Information Management by Thai Provincial University Libraries

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ABSTRACT
This article aims to explore the aims, ways of working, and problems related to local information within a network of collaborating provincial university libraries in Thailand (PULINET). By applying a theoretical framework of the activity theory and qualitative approach to explore the interaction of activity systems involved in common projects, the article identifies contradictions within separate nodes, between the nodes, and between the collaborating systems. The results show how the collaborating participants overcome emerging difficulties by complying with cultural norms and supporting each other, and how the contradictions in the organization as well as in the transfer of competence and sharing of resources affect their collaboration.

KEYWORDS
Local information; collaboration; university libraries; PULINET; Local Information Working Group; Thailand

Background
Main concepts
Local information work is understood in this article as a specific area of work, within Thai provincial university libraries, related to the historical and cultural heritage of local communities. A more detailed analysis of the concept of “local information” is provided elsewhere (Nonthacumjane & Nolin, 2022).

Local information management is regarded as a particular case of information management understood as the application of management principles to the acquisition, organization, control, dissemination, and use of information in all kinds of organizations and for different purposes. This understanding of information management has been used in Choo (2016), Macevičiūtė and Wilson (2005), and Wilson (2003). The management concept is also applied to the organizational processes of decision-making, planning, and implementing collaborative activities of local information professionals in Thailand.
Local information in Thai libraries

In most European countries, activities similar to local information work in Thailand are carried out in public libraries. Reid (2003, p. 1) has explained that “Local studies libraries exist in order to recognize the social, economic and cultural activities and achievements of the local community. They exist in order to record, preserve and celebrate these activities and achievements.” Dewe (2002, p. 20) pointed out that the UK public libraries include local studies collections, which have developed from local history collections (Reed, 1975). A newer study of the UK local studies collections and services by Nolan (2014) recognizes public libraries as the main providers of local information, but also acknowledges the role of academic libraries and other institutions.

Thai public libraries have established local information centers, which are responsible for organizing systems and disseminating necessary information useful to both the village and provincial levels (Lerdsuriyakul, 1999). However, the public libraries in Thailand face several barriers: their legal status as an important section of non-formal education is not recognized; most public librarians in rural areas are not educated professionals (Sacchanand, 2007), and the reading culture of Thai people and, as a result, the use of public libraries, is low (Cheunwattana, 1999; Cheunwattana, 2002). An evaluation of public libraries in Thailand showed that their performance does not satisfy the criteria developed by the Council (Sacchanand et al., 2006). These reasons have pushed the responsibilities for local information on to the regional (provincial) university libraries.

Thai university libraries are recognized as high-potential information service institutions. They have played an essential role in developing the information society (Kasetsiri, 2001, p. 25). They are much more developed than public libraries because of better financial support. Generally, university librarians are well-qualified with at least a bachelor’s degree in library and information science or related fields. Some positions require a master’s degree in library and information science or related subjects. The university libraries provide local information services focusing on supporting the development of learning processes and quality of life to encourage the sustainable strength of Thai society (Kwanchadil, 2011), as required by government policies (Baron-Gutty & Chupradit, 2009; National Education Act B.E. 2542, 1999; Srisa-Ard, 2009; The Office of the Education Council, 2008).

The main purposes of the universities’ local information work in Thailand include:

1. supporting government acts and policies by providing local information to support their community’s needs, to conserve and spread local wisdom for strengthening local cultures and identities, and contributing to the cohesion of Thai society (The Office of the Prime Minister, 2016);
2. supporting local and regional studies, related to the geographical area, e.g., a province or some parts of a country, such as “Lannakadee” or “Taksinkadee” (in the northern and southern parts of Thailand). The regional study can apply to a larger region of the country, or to several neighboring countries, for instance, “South Asia studies” (Abhakara, 1993);
3. creating a unique local information collection and contributing to the preservation of local cultural heritage. Working with local information secures a special place for libraries in the information networks of the institutions, which pursue the major purpose of sharing local information within the network (Abhakara, 1993);
beyond this, local information is perceived as critical for genealogy studies, local history, and community cohesion. (Somboonanek, 2001, p. 56).

**The provincial university library network**

The Provincial University Library Network, formally abbreviated to PULINET, was established in 1986 by Chiang Mai University Library to manage library resources collaboratively and to promote information sharing among the provincial university libraries. Based on the consensus of a meeting of provincial university presidents in 1985, the provincial universities had “to initiate the practical project aimed at minimizing the budgets by rapid and conventional information sharing” (The Provincial University Library Network, 2021).

PULINET unites 20 provincial public university libraries, which undertake a range of collaborative projects within the network and benefit from sharing services and resources.

PULINET consists of five groups composed of representatives from the library members: Board of Directors (library directors from the library members), Services Working Group, Journals Working Group, Local Information Working Group, and the Technology and Library Standards Development Group.

The Local Information Working Group was established to support Thai government policy on social and economic development in the regions, to support cultural education programs, and to encourage the preservation and dissemination of local information (The Provincial University Library Network, 2021). Each member library provides local information services to their users and many do this through their local information departments or similar units.

**Research problem and aim**

Cooperation and collaboration among libraries have taken different forms and are explored quite widely in the library literature. Providing local information services for the needs of a wider local community would be a rather unusual role for university libraries in the West, though many of them are engaged with the local communities. Thus, this article aims to explore the organizational solutions and problems related to local information work within this complex network of cooperating institutions from the point of view of the professionals participating in this activity.

**Research questions**

With regard to this research problem we have identified the following research questions:

- How are the aims and responsibilities of the Local Information Working Group and its members perceived by the study participants?
- What tools are used by the members of the Group to achieve its aims?
- How do the norms of the Group affect the division of labor among the participants?
- What tensions and contradictions can be identified in the existing local information activity system?
Conceptual framework

The study applies the activity theory model, developed by Engeström (2001b) and presented in Figure 1. The model implies a collectively meaningful object constructed by two or more activity systems. The theory draws on the concept that joint activities are the units of analysis. The model was developed as the conceptual tool to understand dialogue, multiple perspectives, and networks of interacting activities that are suitable for the analysis of organizational collaboration and cooperation. This model allows the study of the relationships between different activity systems (Engeström, 2001b).

Engeström (2001b) has proposed five principles that underpin the application of this model:

1. Two or more interacting object-oriented activity systems in its network relation(s) to other activity systems are taken as the main unit of analysis; the division of labor separates several actions within the system but also combines them to affect the common object (Sannino & Engeström, 2018).
2. The activity system is involved in a network of interactions where multiple points of view, traditions, and interests exist. The division of labor in an activity develops a place for the participants. This multi-voice nature is the source of innovation in networks of interacting activity systems. However, it is also a source of tension and negotiation.
3. Activity theory is also known as “cultural, historical activity theory,” acknowledging that activity systems are formed and transformed over time and within particular organizational and community cultures. Thus, the problems and potentials can only be understood against their own history. The term history applies to both the local history and the global history in the activity and the history of conceptual ideas and tools that have been applied in the activity.
4. Contradictions are the source of change and development in an activity system. Contradictions are accumulated tensions within and between activity systems, specifically historically accumulated structural tensions. They are divided into primary (contradictions within the nodes of the activity system), secondary (contradictions between the nodes of the activity system), tertiary (contradictions between the nodes of the activity system), and quaternary (contradictions between the nodes of the activity system).
introduced by a more advanced activity within the central activity system), and quaternary (contradictions with the external activity system) (Engeström, 2001a).

5. The fifth principle is the possibility of expansive transformation. As the contradictions are raised, some individual participants begin to question and even deviate from the established norms. This may create a cycle of qualitative transformation and a collaborative change process. The expansive transformation is accomplished when the new activity system is launched as the new practice (Engeström, 2001b).

This version of the activity theory has been applied to studies of collaboration in different areas, such as decision-making in medical care (Engeström, 2001b), collaboration of different actors in education (Yamazumi, 2008), development of open source communities (Hemetsberger & Reinhardt, 2009), collaboration between two services in offender rehabilitation (Hean et al., 2018), and construction management (Gottlieb & Haugbølle, 2013). These studies explored the complexes of various tools and their role in collaboration success (Hean et al., 2018; Hemetsberger & Reinhardt, 2009), challenges and tensions emerging between different systems, and their transformative power (Gottlieb & Haugbølle, 2013; Engeström, 2001b) or limiting effects on collaboration (Meijer et al., 2021; Yamazumi, 2008).

In library and information research, Wilson (2009) has presented several studies that used activity theory or its concepts in interactive information retrieval and information seeking. In one of the studies, Spasser (2002) explained how a project of the construction of a digital library of the Flora of North America underwent a reorganization into a large-scale database and electronic publishing as traditional methods proved to be inefficient. The study applies activity theory to a vast collaborative project involving over 800 participants (academic, governmental, private organizations, and individuals) to create the primary document management system for the Flora of North America. This approach enabled an understanding of the differences between communities of activity involved in the project (e.g., approaches to work and how they define themselves in relation to others, their functions, and roles, tools applied for their tasks, objects of work, shared identities and goals), which affect their ability to cooperate in achieving the overall aims. The author has managed to identify key contradictions “emanating from differing objectives” (Spasser, 2002, p. 98) as especially dangerous for the sense of identity of participants, while the conceptual and physical tools of the activity or different construction of the object of the project create “radically different contexts” (p. 99) leading to fragmentation, absence of collective vision and, finally, the complete transformation of the project. At the same time, the author follows a smaller more cohesive community of bryology within the same project that manages successfully to overcome tensions with other collaborating groups, setting an example for reorganization (pp. 101–102).

Another study using activity theory was conducted in Norway and explored inter-institutional collaboration between teachers, schools, and public librarians in literacy education (Eri, 2018; Eri & Pihl, 2017). The study used activity theory to explore contradictions, barriers, and opportunities in small-scale projects for such partnerships and has confirmed earlier findings by Kaptelinin and Nardi (2006, p. 157) that collaborating
professionals can share the same objects of activity, but their motives of participating in it may be different and contradictory. Moreover, the contradictions occur not only in the primary activity systems and secondary collaborative activity systems but may be introduced by external agents, such as local educational authorities, as tertiary contradictions. All contradictions can obstruct collaboration, but also stimulate the search for creative resolution of problems and transformative change (Eri & Pihl, 2017).

The study carried out in the City Center Library of the University of Helsinki found that the primary contradiction of the different perceptions of the value of library services was connected to the secondary contradictions between the services provided and the outcomes for the users, while the tertiary and quaternary contradictions were intertwined as the library started the implementation of the new approach and met the resistance from inside the library and the parent organization (Sannino & Engeström, 2018).

This study explores a collaboration between the activity systems sharing the object of local information. The tensions may emerge in the management of collaborative activities of local information professionals working in local information departments of Thai provincial university libraries and conducting common projects as members of the Local Information Working Group of PULINET.

**Earlier research on academic library collaboration**

The importance of interlibrary collaboration and cooperation, which is a natural part of library functions, was pointed out already in 1886 by Dewey, who outlined the benefits, especially in sharing resources (1886). Wilson (1975) presented the typology of library cooperation, involving exchange (e.g., of materials, information, staff, or even users); coalition for developing or providing services, technological solutions, or systems; and cooption for information exchange or future cooperation (Wilson, 1975, p. 144). Later and in recent times, the interaction of libraries has been also characterized in similar terms of “networking, which only involves exchanging information; coordinating, in which organizations begin to plan activities to achieve a common goal; cooperating, in which organizations also share resources; and collaboration, in which the capacity of each partner is increased through working together” (Himmelman, 2002; Saunders & Corning, 2020, p. 453).

Applying these differences to research on library interactions, we see that the whole range is covered in library research with networking and coordinating being widely applied by libraries as initial phases of further cooperation and collaboration (Saunders & Corning, 2020).

In the digital environment, establish agreements to merge catalogs, establish union databases, and develop software (Bailey-Hainer et al., 2014) with the aim of increasing efficiency and reducing costs (Turner, 2014). These arrangements are driven by the constantly rising prices for resources: libraries join in efforts to increase their purchasing power to negotiate collective licensing at reduced prices for electronic resources (Bakker, 1998; Chalhoub, 2017). Moreover, libraries share resources to overcome not only budget cuts and licensing terms but also to enable access to resources by users and libraries (Ellingson et al., 2016; Maskell, 2008; Schofield et al., 2001). Thus, libraries share different kinds of resources including library materials but also metadata, computer resources, best practices, and expertise (Webster, 2006).
Mugridge (2013) notes that most libraries share resources to overcome various challenges linked to flat, diminishing, or no budgets at all. The aim of such collaborations is to strengthen libraries through sharing staff expertise and facilities, and to bridge existing gaps in their resources (Mugridge, 2013). As users’ needs increase libraries seek to cooperate and share resources to supplement their local collections (Breeding, 2013; Evans & Saponaro, 2012). Resource sharing is an important part of the package of services to users, a solution to the lack of resources through improved access, and a way of supporting research (Chalhoub, 2017; Jalloh, 1999; Patterson, 2009; Shreeves, 1997). In connection with the use of ICT in resource sharing, several studies highlight the economic benefits (Acadia, 2016; Flemming, 2011; Rintamäki et al., 2018). Library consortia are set up specifically as a reaction to rising prices for electronic products. Phae (2017), reporting the evaluation of an academic consortium, suggests that various improvements in the management of the consortium and of individual libraries have been attained. Hasan et al. (2003) report on plans to use the open source, digital library software, Greenstone, to host digital libraries in several Asian languages.

Cooperation and collaboration in the area of local information work are little covered by the research. Though Dewe has mentioned that cultural heritage institutions, for example, records and archives offices and museums, cooperate increasingly with the public library to develop the local heritage collections: “The seeker after local information may use the local studies library as part of a network of resources providers at local, regional and national and even international level” (Dewe, 2002, p. 21). This scarcity of research may be explained by the nature of local history and other local information collection fragmentation and localized interest in their content. Most of the studies cover cooperation between libraries, archives, and museums (e.g., Yarrow et al., 2008). However, it started changing with the arrival of digital tools. For example, Nagatsuaka (2019) has explored the shortcomings and benefits of linkages among the digital collections of local history resources through metadata supplied by university libraries, prefectural libraries, regional repositories, a cloud service for digital collections, museums, archives, and other memory institutions in Japan to the National Diet Library Digital Collections.

The emergence of various digital technologies and their application in libraries helps in stimulating and reconsidering the nature of library cooperation in Thailand and other South East Asian countries. However, there the existing research (Hoang & Genoni, 2017; Phae, 2017; Praditteera, 2016; Ruenwai & Morris, 2008; Wattananusit, 2000) is largely descriptive and not theoretically based.

**Research methods**

As we were interested in the experiences and perceptions of the local information professionals of their interactions within the Group and with the local information units that they were representing, interviews were the appropriate method of data collection. Semi-structured interviews were employed to provide the direction to the conversation and at the same time to probe into the answers of the participants.

Seven experts in local information and 23 Working Group members were selected as the participants, because of their influence on the Group’s work. The Group has applied
the ideas, knowledge, and experiences of the experts in their work throughout the period of its functioning, and members have participated in the planning of the Group’s work, implemented its projects, participated in building the group, shared and exchanged their knowledge and experiences on the local information, and have applied their experience in the university libraries. Thus, the Group’s activities were influenced by two slightly different but overlapping groups of people.

The topics in the interview schedule for the local information experts were formulated with the aim of learning about the development of the Working Group and local information departments in the university libraries, to understand their perception of local information and its management, and what role they assign to the Group, and to the local information departments in the participating libraries. The schedule for the Group members was similarly designed but included questions about the actions the participants perform in the Group or its projects, the tools used in achieving their aims, their understanding of the functions of local information departments, the division of labor between the Group and the provincial university libraries, and their perception of professional responsibilities of local information librarians.

The interviews were conducted in the Thai language face-to-face and as voice calls using social media (the communications app LINE) lasting from 1 to 2 h. The comments were translated by the first author. In the text, they are identified by the abbreviation “PN” and the participant’s number (e.g., PN01).

The interviews were combined with non-participant observation of the Local Information Working Group’s meetings, training sessions, educational field trips, local information departmental tours, local information seminars, and conferences. The observations enabled the collection of data about the activities, actions, and interactional and organizational processes. They also provided insight into the participants’ behavior and interactions in particular situations within the study context, especially relating to information sharing or relations in the group that could be taken for granted by the participants (Patton, 1990).

To study the setting of the study, it was required to learn the necessary background of its history, organizational structure, rules, norms, plans, activities, and projects. For this reason, a document study was also undertaken.

The initial document study and observations were carried out in 2015 and the last interviews were performed at the end of 2017.

**Results**

We present the results using the main concepts in the activity theory highlighting the complexity of the activity subject, the division of labor, and the tools used for interaction among local information professionals.

**The aims and features of the Local Information Working Group**

The community in the activity systems includes individuals and subgroups or wider collectives sharing the same general object, which is in itself a matter of sense-making and even societal transformation (Sannino & Engeström, 2018). Thus, we can see the subject
of the integrated activity system as part of the community and the community as dialectically included in the subject, which allows us to regard the libraries and the Local Information Working Group and their members as subjects united by communal aims, norms and rules and the common object of activity approached with different motives (Sannino & Engeström, 2018).

The Working Group is responsible for “the preservation of the Thai culture and the local wisdom” in PULINET (The Provincial University Library Network, 2021). Organizing cooperation and collaboration in creating and sharing local information is important for the network and provincial university libraries as confirmed by the participants of the study:

Local information is seen as the identity of this network. Therefore, the main duty of PULINET is to support the development of the local information, which is recognized as an important aspect of the network (PN24).

The PULINET has the local information that is distinctively different from the central university libraries [i.e., situated in Bangkok, author note]. So, the local information empowers PULINET’s strength (PN25).

The Working Group pursued three aims: to spread the knowledge of and standards of work with local information in Thai society; to train local information professionals for provincial university libraries; to create, preserve, and provide local information resources. The Group saw its duties in relation to these aims as

- collaborative collection and organizing of local information in various forms, including printed and digital ones, and disseminating it to the public (The Local Information Working Group, 2017),
- organizing local information meetings (three times a year), conferences and seminars for Thailand librarians,
- organized local information training, field trips, and local information department tours for its members (The Local Information Working Group, 2017).

The observation during 2016–2017 confirmed that the LIWG worked on creating the databases of local information; developing new projects; organizing two LIWG meetings, two tours to local information departments, two field trips, a seminar, and a conference. Each meeting was held in a different region of Thailand and organized and hosted by a LIWG member (Field notes, 2016–2017).

The participants of the study emphasized the motivation driving the establishment of the Group and its activities, namely, the need for cooperation to fulfill a unique and important aim: “There are no other working groups or organizations that carry out this project. We are an established working group that is active” (PN04).

The collaborative nature and the links between the group and the local information departments of the university libraries are also strengthened by the need for increased competence. These main activities relating to the creation and spread of local information and increasing knowledge and skills of the Working Group members are confirmed by participants, for example:

The LIWG has performed its duties in various ways, for example, the development of the local information databases, Thai textile database, and Thai Temple database, organizing
the local information training and conferences... tours to the local information
departments and the field trips (PN14).

The mutual interdependence of the Working Group and local information units is
made visible through their interlinked websites. The Group has access to the local infor-
mation websites of the participating libraries and vice versa. Thus, the website of the
Group could be seen as a web portal for local information in Thailand.

The local information units realize the benefits of such interlinking, pooling, and
sharing the existing information through the portal:

I think that most local information departments have played the main role as a supporter
of LIWG. So, LIWG can develop their collection and services as a hub of local information
in Thailand, as a one-stop web portal as well (PN06).

On the other hand, this commitment, resources, and opportunities were not equally
spread and reflected different situations of the participating actors as we will see further.

**Local information in provincial university libraries**

The perception of the role of local information by the leaders of the collaborating libra-
ries was diverse. Some libraries have set local information as a very important priority,
or “perceive the local information as the essential issue in their policies” (PN03).
Whereas, others “do not realize that local information is a very important issue, so they
do not set the local information as the priority issue in their policies” (PN23).

This different perception of local information is related to the organization of local
information work in the libraries.

Some libraries indicate the Local Information Department as unique and very essen-
tial to their university library and the locality. Departments are known as local learning
center for all local people. For example, Chang Mai University Library has high regard
for the importance of Northern Thai information, and this university library set up a
Local Information Department for their local people to access as a Northern Thailand
Information Center (PN23).

In such cases, the university libraries ensure that financial, competence, and time
resources are adequate to the aims of the local information departments (PN18).
However, not all participating libraries have the same priorities. Some of them are fairly
new and need resources for the management of the essential services for their univer-
sities and their local information departments receive less support (PN16). Each library
has a different organizational structure for local information services (PN23): five have
established a Local Information Center; two have created Local Information Sections in
their Archives Departments; seven have created sections within other departments; three
have created collections or projects, and three universities have no specified section but
give responsibility to the library as a whole. Thus, we see clear differences between
member libraries in prioritizing local information as only five out of 20 have established
independent local information departments with rich collections, a range of services,
and projects.

Human resources allocated to local information work in the libraries differ signifi-
cantly. The local information centers usually have full-time staff working with local
information, but most participants pointed out that their libraries do not have a
specific position of the local information “librarian” or “information professional.” Local information work was only part of their job descriptions:

My university library does not set any position for the information professional working in the local information management. For myself, I have been assigned to work on the local information management, approximately 10–20% of my job descriptions (PN22).

The differences in organizational structures and resources allocated to local information management and work have consequences for the work of the Local Information Working Group and for the actual involvement of their representatives in the work of the group.

**Members of the Local Information Working Group**

The Working Group consists of the members representing the local information departments of the member libraries, who generally participate for two years. A participating university library can extend the period of their representative without restriction. Each university library can also retract their representative, change them, or assign them again to participate several times. This situation makes the Group very flexible and dynamic in terms of changing membership and the time members spend in it. This leads to a particular situation that can be characterized as a seniority system as explained by the head of the Group:

The members of LIWG are categorized by the duration of working in LIWG into three groups, namely, junior, mid-career, and senior. The junior information professionals are members who have worked in the group for less than three years. Ten members are in this group. The mid-career information professionals are members who have worked in the group for 4–9 years. There are eight members classified in this group. The senior information professionals are members who have worked in the group for ten years and more. This group consists of five members (PN23).

Relatively new members refer to themselves as learners and the group as a learning environment:

I haven’t much knowledge and experience of the local information and the local information management. I think that LIWG is a local information mentoring group. I believe that I can learn this local information aspect from other experienced members. (PN02).

The members referred to as mid-career professionals emphasize their increasing experience and the responsibilities they are assigned by the Group, and work on local information projects, such as the development of Thai Textiles or Temples databases (PN11, PN12). The members in the Working Group for more than 10 years are regarded as experts and mentors themselves, and by junior and mid-career professionals. The senior information professionals had more authority than other information professionals in the group because the Thai social norm gives respect to seniority and, as a junior member expressed it:

As a group, we accept the social norm of “seniority.” The junior person needs to respect and follow the senior people’s opinions (PN04).

**Roles in the Local Information Working Group**

Division of labor runs along the lines of the horizontal responsibility for work tasks, but also vertical distribution of power and status (Sannino & Engeström, 2018). Thus,
we can interpret the roles and responsibilities of different groups and members of the community in light of the division of labor within the activity system.

The seniority principle was reflected in the management of the Group: the Head, though elected, was usually a senior professional, while secretaries were elected by senior and mid-career members. This was also observed in relation to the less formal roles that emerged in the activity of the Group. The senior members were expected to take the lead in the development of new projects and solving problems since they had the experience to deal with these aspects. Their task was also to welcome the newcomers and support their learning as “the mentors of LIWG.” They always acted in the group as “the inspirational persons” to increase the sense of belonging to the Group for everyone.

All senior information professionals worked on the Group projects and activities together with the junior and mid-career information professionals. Juniors usually treated these opportunities as learning situations; however, senior members also emphasized the learning possibilities:

I am passionate about learning about local information in detail. Also, I always participate in group activities in several parts of Thailand. These activities allow me to have a chance to learn and understand the various local information aspects in each part of Thailand (PN23).

One important aspect of project work was always related to information technology. This allowed the junior members to act as experts and mentors as they were more knowledgeable. They were helping some experienced members to learn about the development of databases or managing social media:

The junior information professionals had more knowledge about IT to assist the experienced member to use the software related to the group projects (PN17).

The learning experience involved also the knowledge of the Working Group and its way of operation:

At the meetings, I got some advice and suggestions from the experienced members on how to work in the group projects. These all helped me understand the local information works within the group” (PN09).

The Group was also the source of information on the management of information and local information departments in general:

I am quite new in this area... Therefore, I listened to the senior members’ experiences in discussing matters, such as budget, policy, and human resources” (PN07).

Thus, the seniority principle influenced not only the roles of the Group members in working situations but the division of labor and the behavior within the Group. The permanent division of labor was based on three stages of participation: it started with a junior information professional positioning as a member of the group, then, in time, the member assumed more duties and responsibilities, with accumulating experience and knowledge of the Group activities. As they continued to participate and build the experience for ten or more years, they could become a mentor and acquire the power to confer legitimacy to the junior information professionals or even to lead the Group.
**Sharing information and work**

The observation of Group activities revealed that seniority also affects other aspects of collaboration. The junior members shared their opinion at Group meetings less than the experienced ones, suggesting that:

I am a new member, and I see myself as a naïve member in the group. At the group activities, I hardly comment on each topic, because I am not quite sure that my suggestion is right. I should participate in more group activities. These activities will allow me to learn the local information aspects of the experienced members. So, I hope that I will gain much more knowledge of local information. Afterwards, I will be confident to present more ideas in the group activities (PN04).

The same observation confirmed that more experienced members had more responsibilities in the projects and other Group activities than the junior members. For instance, at a local information tour or PULINET conference, the experienced members were selected to represent the Group and present the issues of local information management. Furthermore, experienced members were mainly responsible for organizing the meetings, conferences, local information department tours, training, and field trips. New members were playing roles of the participants or the learners in these activities. As experts in local information content, the experienced members were responsible for quality issues pertaining to local information content development and management. They acted as mentors in giving advice and suggestions on writing local information work in articles, websites, books, manuals, and related works (Field notes, 2016–2017).

The actual division of responsibilities among the group members is visible in one of the projects related to a local information database:

1. A senior member was appointed as head of the group to facilitate and manage the development of the database. The head of the group pointed out: “It is my administrative duty that I have to carry it out until it is done” (PN23).
2. One junior member and one more experienced were assigned as IT staff. Their responsibility was to study open source software for the development of the database, develop the website, and manage other IT aspects of the project. They also facilitated communication between the project group and the IT Working Group of PULINET, which was supposed to provide technological assistance (PN01).
3. Almost all other members of the Group were involved in providing content for the database. When the data was lost due to external shared server problems, the Group collectively decided that it was impossible to restore it. Therefore, each member took the responsibility to collect ten articles to replace those lost. Some participants (PN01, PN14, and PN21) collected the data by doing fieldwork in their city. They conducted interviews with the local experts and searched the related data in books and websites (PN03, PN07, PN10, and PN20). They then put this data through the shared drive.

This extended collective effort helped the group to counteract the factual damage, but had a side effect of strengthening the cohesion of the group:

Every project group has maintained a good working culture in the Local Information Working Group. The active cooperation, mutual help in various activities, and transferring
of knowledge from the seniors to the juniors within the LIWG yield good results. It is a culture of a good collaboration of the LIWG (PN13).

**Rules and tools for collaboration**

The tools in activity theory are of different nature and can be physical instruments or cognitive and psychological, such as language. They can be seen in relation to a particular activity of a particular actor, but also within the whole collectively constructed activity system and even within its interaction with other activity systems (Engeström et al., 2000). Rules can be understood as regulations, norms, and conventions both explicit and implicit, that constrain actions within the activity system (Sannino & Engeström, 2018).

The tools used in the activity system of the Working Group may be related to its activities. For example, an external shared server for storing collected and digitized materials; the interviews with local experts and specific equipment for collecting the cultural heritage data; open source software for the database. The field trips can be regarded as tools for competence development and sharing of experience, but we may also identify tools (e.g., transport) used in the field trips.

The Working Group includes representatives of governmental organizations (i.e., university libraries). Therefore, it needs to follow the rules of bureaucracy and accommodate the ways of Thai governmental organizations. This dependency manifests itself in several ways, that may be mandatory or optional, accepted for the sake of convenience.

The latter can be exemplified by the guidelines and scope of the local information defined and approved by the Ministry of Culture that the Group has used in its report and a manual. The suggestion has come from the Head of the Group:

Due to the fact that there are various interpretations of the local information conceptions in the LIWG, I classify and propose the scope of the local information set by the Ministry of Culture for the common understanding and apply it in the LIWG work. Therefore, all group members accept this scope and apply it in the LIWG work (PN23).

Several participants confirmed that the conception of the local information used by the Group in the projects (PN07) and the development of databases (PN11) is as defined by the Ministry of Culture. It has also become the main conceptual tool for collaborating within local cultural heritage and other areas.

We also can see mandatory bureaucratic rules in using the letters informing the members about meetings and group activities as they represent official documents that each member receives by post and submits to the directors of the libraries. Moving through the organizational structures of each university these letters become legitimized as “the true copies” (PN13). To speed up the process the Group has also used a shared drive or social media to send the invitations and posted the paper letter to comply with the official demands (from LINE observation notes).

The Group has set its own guidelines for a variety of activities. For example, the following guidelines were disseminated and recorded through the shared drive of the group:

“The development of the digital local information repository is done by using OAI-PMH as the standard platform to connect to the database. It is used to collect bibliography,
which is fundamental for creating a basic One Search in an organization. Secondly, we use the Dublin Core Metadata in the cataloguing of digital information. Finally, the standards of the still picture and motion picture for the media storage are specified. The video file is limited to 15 megabytes. The picture file is limited to 5 megabytes, using the file type of JPEG (JPG) (Notes of the LIWG meeting at the Maejo University library on 09 January 2017).

The Group also has created a manual for working with the local textile database available through the website of the Group. It can be downloaded by all members (PN01, PN14). This manual describes how to use the database from log-in to uploading the textile data (text, images, video), explains how to edit, add or delete the data, how to search by using the tag cloud, and how to present the information about textiles in the digital record, which terms to use for tagging location, materials, techniques, and other information.

The meetings and LINE were used for planning and organizing activities and scheduling events. The LIWG generally held three meetings a year for face-to-face communication. Meeting dates were suggested and discussed on LINE, training schedules were presented at the meetings, the field trips and visits to the provincial university libraries were agreed, seminars and conferences were planned. Normally, a training session was aligned with a meeting, as mentioned by a participant, “A training [session] was set as a part of the group meetings’ plan” (PN12).

The Group used the meetings as the tools for building a good atmosphere helping common understanding of the local information work, as illustrated by one of the participants:

I received advice from the meeting. Oh! In my feeling it was very friendly. The seniors were so nice. It was like working in a family. It was the gathering of brothers and sisters, greeting, talking, and having meals together. When there was a problem in the group, the senior advised solving the problem (PN16).

The discussions of the Group’s projects and plans were followed up by a training session. Each session took a half-day or a day. In addition to competence development, these sessions also strengthened the cohesion of the group through mutual learning and in setting common approaches for work in the Group and the local information departments: “The training sessions enabled the Working Group to gain knowledge, experience, then we could develop and apply it to our local information work” (PN21). The mentor-mentee system established good relationships between the seniors and the newcomers, and helped to achieve common understanding of local information activities (PN02).

Thus, both training and mentoring were used as a bridge between the Group’s activity system and the activity systems of the local information departments.

The meetings, field trips, and visits to the local information departments also served for sharing experiences and work methods. At the meetings, each member presented the updated reports of the local information management at their library, which were quite rich and different from each other, and shared their understandings and work-related problems. The visits to university libraries were especially important in this respect (PN08).

Thus, some of the tools provide both physical and tangible experience and provide mental models of work or understanding of the value of professional work.
Discussion

How are the aims and responsibilities of the Local Information Working Group and its members perceived by the study participants?

The members of the Working Group represent provincial university libraries, which are members of PULINET. According to them, working with local information sets this network and provincial university libraries apart from other university libraries and serves as a feature of their identity. The Group itself is perceived as a unique body that strengthens local information work by co-producing and sharing local information resources and competence, thereby meeting the criteria for cooperation and collaboration (Saunders & Corning, 2020) or coalition (Wilson, 1975). By sharing their resources they provide access to local information in the regions, for the whole country and beyond, and help to supplement local collections, confirming the findings of Evans and Saponaro (2012) and Breeding (2013).

The individual participants in the Group regard their responsibilities in relation to the experience and knowledge that they have acquired while working with local information. Those who are in the Group for a shorter time see their main responsibility as learning and acquiring professional skills and following the advice of more experienced colleagues. Those who have been in the group longer feel responsible for leading projects, training newcomers, and organizing the Group’s work. But the more junior also feel confident in the competence they have and actively take part in sharing information or in helping seniors in the areas in which they are less well-informed. This attitude toward each other and their common goals creates cohesion in the Group and helps to overcome difficulties arising in the process. As the Group is relatively small and works with a common object, it seems that this process is rather smooth and follows a similar pattern to the bryology community in Spasser’s study, rather than the huge and diverse system of the Flora of the North (Spasser, 2002).

What tools are used by the members of the group to achieve its aims?

The communication between the Working Group and the local information units in the university libraries is maintained by the representatives of the libraries in the Group carrying messages, implementing standards, and work methods developed collectively in their libraries. Internet communication provides visible links to this communication through the websites of the Group and libraries and “bridge the gap in their resources” (Mugridge, 2013; Nagatsuka, 2019).

A variety of training and educational activities help to increase competence in the university libraries and in maintaining a certain level of interest in local communication even in those institutions that have the least resources and do not regard it as a priority. Thus, both sharing the resources through the internet, and training activities, increase the power of the collaborating activity systems and the supply of resources and services to their clients (Pereira & Franco, 2020).

In planning and organizing the work of the Group, it uses bureaucratic tools that legitimize its activity with the governmental organizations. The planning and coordination of the activities for achieving the aims of the group are carried out with the help
of social media (LINE). The Group also excels in combining a variety of different activities into organized meetings and events, thus saving resources and increasing efficiency, which has been seen in Phae (2017) and Rintamäki et al. (2018).

**How do the norms of the group affect the division of labor among the participants?**

The “seniority principle” seems to affect the division of labor in the group to a large extent. It is important with regard to the professional education of newcomers, and in the representation of groups achievements, and in the distribution of duties in the management of the Group. This difference in the experience and professional expertise related to the length of membership in the group is emphasized by all members. It seems that they perceive it as a point of departure in assessing their own role and capabilities as well as the other members of the group.

At the same time, the members are expected to participate in the projects, collect data, study local cultural heritage objects and traditions, acquire skills in research and apply the standards as soon as they arrive. Several socializing measures help them, as well as manuals, guides, handbooks, and other rules created by the Group or accepted by authoritative organizations, such as the Ministry of Culture. These accepted norms and standards help the group to work together toward the same goal, to share resources (Webster, 2006), and harmonize the work of different libraries (Butler et al., 2006).

**What tensions and contradictions can be identified in the existing local information activity system?**

Our results point to the existence of primary contradictions within the subjects of the collaborating activity systems. Though the subjects agree about the essence of the object of their activity, it is not the only one that the university libraries work with. They do not assign the same importance to it as the Working Group, which sees local information as its sole concern. Thus, we can identify primary contradictions within the subject of the activity expressed by the participants as the lack of time allocated for local information work or attention from the management of the universities and their libraries. On the other hand, we see the tension between the membership period assigned by the Group and the member libraries, many of which expect their representatives to work much longer. This also points to the diverse motivations existing in different activity systems, such as the Group expecting to spread knowledge of local information management through training more professionals over a shorter time, and the need for university libraries to ensure a high level of services through increased expertise of the staff. We can see similar contradictions identified in Kaptelinin and Nardi (2006) and Engeström (2001b).

Tools present several contradictions that are mainly secondary and relate to the level of expertise that may restrict or assist the usage of these tools. The Group members are aware of these tensions and employ educational tools to remove the restrictions, but also assign certain functions and tasks to particular members or even external partners with the required competence to use tools and help in achieving their aims. At times
when these measures fail, actions need to be taken by mobilizing and providing additional incentives. The cultural norm of seniority helps to achieve group cohesion and overcome obstacles in some of these cases. On the other hand, the seniority norm extends not only to the relationships in the Group but also to the perception of external partners and standards provided by, e.g., the Ministry of Culture, which may take precedence over the expertise of the professionals in the most important issues, such as defining the object of the Group’s activity.

Though the seniority norm is useful in creating group cohesion, it may also become somewhat restrictive when a significant and creative organizational change is necessary for the complex activity system that involves the members of the community in addition to the Working Group. Some of these tensions and contradictions are visible between the individual membership in the Group relying on cohesion and the provincial university libraries that are the members of the group de jure. The seniority norm within the group is then overruled by the seniority norm within the member libraries and the standards of local information management differ among the provincial university libraries, as well as the possibilities of the individual members of the Group. These contradictions can be regarded as tertiary, i.e., introduced by the more advanced activities of the Group (Engeström, 2001a).

The emergence of the Working Group in PULINET may be regarded as a result of a quaternary contradiction caused by the distribution of resources to different types of libraries and pushing for the redistribution of responsibilities and functions (public and provincial university libraries), which was a creative resolution of the problem, as in Eri and Pihl (2017).

**Conclusion**

The Local Information Working Group of PULINET performs valuable functions in coordinating the work of provincial libraries in Thailand in relation to the collection, curation, and sharing of local cultural information. The degree of stability over time of the membership of the Group, together with its information sharing and educational and training roles for Group members, contributes to the development of relevant expertise in the provincial libraries.

However, the benefits of the work of the Group are not achieved without the resolution of problems. The activity theory framework has enabled us to identify those problems and tensions and how they are resolved. It is of interest to note that, in general, the problems and tensions are resolved, and those that remain are largely a consequence of the unequal distribution of resources to the task by the participating libraries, a factor outside the control of the Working Group.

One of the limitations of the study is the subjectivity of the accounts of the participants closely involved with the group. Observation has helped to overcome this limitation to some extent; however, it would be useful to explore how the outcomes of the Group’s activity and their usefulness are perceived by their users and the wider professional community.

**Disclosure statement**

No potential conflict of interest was reported by the author(s).
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