## What Promotes and Inhibits Sharing of Learning Designs? Teachers' Perspectives

Verner Larsen, PhD, Lisbeth Lunde Frederiksen, PhD, and Thomas Iskov, PhD VIA University College

#### Keywords

Learning designs, sharing practices, pedagogical autonomy, teacher organization, practice architectures, knowledge exchange

#### **Article History**

Received 4 Dec 2023 Received in revised 12 Apr 2024 Accepted 17 Apr 2024 Available online 13 May 2024

© () (S) This article is published under a <u>Creative Commons Attribution-</u> <u>Non Commercial-No Derivatives 4.0</u> <u>International License (CC BY-NC-ND 4.0)</u> **\*Original Research Papers** are papers that report on original empirical research with a focus on teaching and learning.

Papers may be qualitative or quantitative and include an Abstract, Introduction, Method, Results, Discussion, and Reference section, as well as any tables and/or figures.

#### Abstract

This article contributes to the research on learning design by examining the collaborative practices among teachers in professional education. The focus extends beyond classroom activities to encompass the sharing and exchange of diverse knowledge, experience and teaching materials. By drawing from experience at a Danish university college, the article emphasizes the need to move beyond the limitations of highly regulated top-down teaching formats. Through the exploration of four selected empirical cases, it highlights the qualifying aspects of sharing practices as perceived by teachers. The article sheds light on the significance of sharing from the teacher's viewpoint. It underscores the importance of pedagogical autonomy and the discretion of individual teachers supported by a sharing culture where educators are expected to make their materials available to others but also benefit from the resources of others in the community. By combining top-down/bottom-up strategies with degrees of formality, the article shows how both strategies can take place in sharing practices in the same organization and still generate pedagogical autonomy as long as a low degree of formality is maintained.

#### Introduction Empirical context and theoretical background

In recent years, there has been a growing interest in higher education for the development, sharing and reuse of learning designs. The background often revolves around economics and efficiency, claiming that more teachers can utilize such designs and thereby save preparation time (Goodyear, 2005). From 2017 to 2020, we conducted an extensive follow-up research project at a Danish university college where the management initiated a strategic development task regarding the development of learning designs (Iskov et al., 2020). The top-down process was initially perceived by the teachers as authoritative. They feared that some teachers were designated to work out standardized teaching designs which other teachers were supposed to replicate for their teaching. Many teachers were concerned that it would lower the quality of teaching if it was not tailored to the current students and the teacher (Iskov et al., 2020). Many felt that their

pedagogical autonomy was threatened. In previous studies, the concept of pedagogical autonomy has proven to be crucial. Pedagogical autonomy refers to the space of the educator's individual agency in choosing goals, content and methods. The space metaphor, however, indicates that there is a limit to what the teacher can change in a learning design that he/she is reusing (Larsen et al., 2023; Iskov et al., 2020; Dohn & Hansen, 2016). Especially in continental and Nordic pedagogical traditions, pedagogical autonomy is highly valued as the individual teacher is believed to know best what a specific student needs (Westbury, Hopman & Riquarts, 1999).

The widespread concept of the reflective practitioner is also closely linked to the concept of pedagogical autonomy, as the teaching must always be adapted to the current context and qualified through ongoing reflection regarding contextual variations (Schön, 1991; Wackerhausen, 2008; Hedegaard & Krogh-Jespersen, 2011).

Therefore, we have connected to research in the field that focuses on the aspect of context sensitivity for qualified reuse of learning designs. Concepts such as translation (Czarniawska & Sevón, 1996; Røvik, 2011), transfer (Tessmer & Richey, 1997; Laurillard, 2008) and transformation (Davinia et al., 2006) are also prominent in this regard. When it comes to the reuse of designs made by others outside the close circle of the teachers who developed the design, Wills and Pegler's (2016) contribution to 'zones of proximity' is important, but the issue is generally poorly illuminated in research. Thus, considerations of rationality and efficiency potentially collide with the teacher's own need to be able to change and adapt designs to the given context and maintain teaching autonomy. However, we do not know enough about the extent to which teachers-in their efforts to maintain pedagogical autonomy-reject others' designs and thereby miss out on knowledge or whether they manage to exchange useful experiences in other ways.

In a more recent follow-up research project on which this article is based, we have therefore moved away from the idea of designs as products created by some and reused by others. Instead, we have delved deeper into the processes considered beneficial for lesson planning when both knowledge, experiences and teaching materials are shared among teachers. We have, therefore, refrained from committing to a design concept and have instead chosen to examine what sharing can entail. We understand sharing broadly as a concept which can encompass various forms of exchange among one or more teachers. With a focus on the teacher's perspective, we have posed the following research question: What characterizes sharing practices that teachers consider qualifying for their teaching, and which conditions promote or hinder such practices? The purpose of the article is thus to contribute to learning design research by focusing on sharing processes which have so far been underexplored.

As mentioned earlier, we align ourselves with that part of design research that focuses on concepts of translation, reuse and context sensitivity. In our prior work (Iskov et al., 2020) and in our review of relevant literature, we have emphasized the concept of 'learning design' over 'instructional design.' Instructional designs often portray a linear view of teaching and learning with distinct units (Wiley, 2002), whereas learning designs emphasize the notion that practice emerges in relation to planning (Dohn et al., 2019, p. 4).

## **Methodology**

In the above-mentioned research question, we use the term sharing practices, thereby adopting the practice-theoretical perspective that we have used as the basis for analyzing the empirical material to get as close as possible to what 'sharing' entails. The practice-theoretical perspective has its origins in T. Schatzki and the practice turn in contemporary theory (Schatzki, 2001). Practice theory constitutes a human and social scientific tradition which, in this context, is represented by Aspfors et al. (2022) and Kemmis et al. (2014). These authors interpret the concept of practice as the unity of sayings, doings and relatings, but the three kinds of practice are always intertwined with the current sites: the structures, relations and conditions that constitute the local context and its practice architecture. This includes various arrangements (culturally discursive, materially economic, and socio-political) that, through semantic, physical and social spaces, are constitutive of practice, practice traditions, and landscapes (Kemmis, 2014a, p. 6).

This practice-theoretical framework suggests that the empirical work generates close and detailed descriptions of practices where field observations and in-depth interviews are particularly relevant, focusing on sayings, doings, and relatings. Therefore, the project is designed as a qualitative multiple-case study where cases have been selected for maximum variation in terms of educational disciplines and organizational forms. The case study contributes with knowledge of general interest based on the particular phenomenon's existence and quality—not its prevalence (Flyvbjerg in Brinkmann & Tanggaard, 2010).

The selection of cases was based on initial conversations with lecturers from different programmes who gave suggestions for some practice contexts where the sharing of plans and teaching is initiated by the lecturers themselves and not primarily controlled from the outside or from above. Based on these indications, we made agreements with the respective individuals for observations and interviews concerning these practice contexts. Empirical studies were then conducted in four different educational cases: The Bachelor of Administration programme, the Teacher Education programme, the Nursing Education programme, and the Health Administrative Coordinator programme. One observation and one in-depth interview were conducted in three out of the four cases. In the Nursing Education programme, only one in-depth interview was conducted.

Based on data from the observations and interviews, the analysis has involved identifying the various 'practice elements' (sayings, doings, and relatings) regarding the different practice architectures (the culturally discursive, materially economic, and social-political structures).

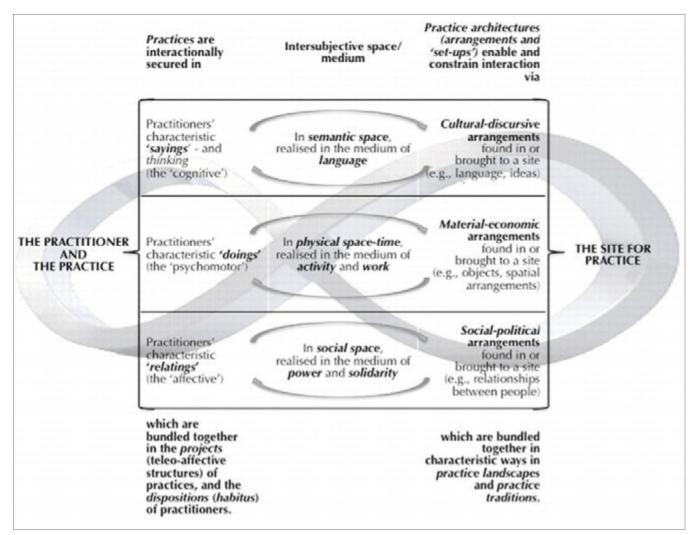


Figure 1. The theory of practice and practice architectures (Kemmis, 2014a, p. 57).

The data analysis process is generally abductive and divided into three steps. First, we did an inductive coding of the

data material from observations and interviews. From this, significant themes were extracted and described, and we

carried out this analysis for each individual case. Then, we carried out a transversal thematic analysis (Braun & Clarke, 2006), where common features from the four cases were identified. Enacting Kemmis' three-part model, we had an analytical framework by which we could analytically identify and divide the cross-cutting themes and process them theoretically. Finally, we made a third and final step: a summary analysis of what characterizes practice architectures for sharing learning designs in the relevant educational contexts. Results from the three analytical steps are presented in the following sections.

#### **Results—cases** Asymmetric relations

In the case concerning the Health Administrative Coordinator (HAC), the relationship between two teachers becomes crucial for the sharing process. This occurs between an experienced teacher (Ex) and a newly hired, inexperienced teacher (Ix). They meet for Ix to be introduced to a teaching programme on the subject of Disease and Health, which Ex has previously managed and has a plan for.

Ex indicates that Ix can change whatever she wants in the material Ex has prepared (such as PowerPoint presentations, etc.). However, according to Ex, it seems to be the immaterial elements of sharing that become the most significant in this practice, namely translation work. This involves the explanation of the programme regulations' intentions and their transformation into a lesson plan. Ix insists on making her own changes and adaptations to Ex's PowerPoint presentations. Ix thus emphasizes her need for pedagogical autonomy along with a need to draw as much as possible from the existing materials and experiences. Sharing is both about inheriting and translating, and to copy the overall structure but still retain the freedom to translate specific teaching materials can be seen as a kind of dual sharing strategy. Ex is willing to give lx as much pedagogical autonomy as possible, but limited time constraints make Ex concerned that she might unintentionally become controlling of the sharing process. For Ex, it becomes about "helping her get started on a subject" (interview with Ex). Thus, a dilemma arises due to the asymmetric relationship between the two teachers, which involves the balance between receiving assistance without being controlled.

## Symmetric relations and common values

The relational aspect also emerges in the case of the Teacher

Education programme (TEP), where the sharing process takes place between experienced teachers in a math team. According to the informant, the team takes responsibility for planning the academic year. Most teachers in the team have long experience of teaching all the subject's content. They work with a common template for a worksheet developed by the team itself. The template includes a description of each teaching session within a theme. The teachers share experiences and articles. They develop tasks, subject knowledge, methods and worksheets for the students on content, form and organization. Through this work, symmetrical relations emerge in the team by shared professional and pedagogical values, teaching attitudes and subject understanding over time. They consider themselves equal in terms of knowledge and experience. Although there is joint planning down to details, they experience significant pedagogical autonomy, which allows each of them to make their teaching context sensitive.

## **Strategies for sharing practices**

In the Bachelor of Administration programme (BAP), various forms of governance and different degrees of formalization come to the fore. The informant himself uses the term "informal sharing practices" several times to describe their practice, which arises spontaneously, intuitively and from the bottom up as well as individually or within teams. This often happens by "dropping by a colleague's office" or by disturbing one's office mate to get ideas or critical feedback. The teachers also email each other for inspiration and assistance. Informal sharing takes place through equal dialogues and constructive criticism, which takes place without being checked and without regard to whether time has been allocated specifically. It primarily involves bottomup processes, a pleasure-driven sharing culture prompted by the teachers themselves to create continuity and coherence for the students and to qualify and develop teaching.

However, more top-down controlled sharing practices are also described. An example is the introduction of the hybrid teaching model. The management initiated this design idea and appointed some teachers who should develop a catalogue of ideas and examples to be posted on a shared website and discussed at staff meetings without it taking on the character of a format dictating what to do. Although the strategy was top-down, the process was weakly regulated, leaving room for pedagogical autonomy for the teachers.

#### Professional and everyday language

In the fourth case from the Nursing Education programme (NEP), characteristics are highlighted regarding what the informants refer to as "culture." This applies to both subject teams and interdisciplinary teams. In the subject team, there is a strong focus on discussing the subject matter, developing common cases and determining progression throughout the educational programme. Additionally, they share specific teaching materials. There is a difference in language use depending on whether it is the subject group or the interdisciplinary group. In the subject groups, they use professional language: "After all, we use professional terms." Pedagogical issues are mostly embedded in the professional language or expressed by everyday language:

"So, we don't sit and think directly about educational theories, but we do that indirectly anyway. We do that indirectly because we are talking about how we can activate the students. For example, the students have difficulties understanding the structure of the heart; how can we help them with that?" (interview with NEPteacher)

Besides developing a pedagogical language through this process, they see the formation of teams as a larger community about teaching where there is nothing called "my teaching." When new people come into the organization, it is quite typical to give access to everything, "I mean, here's all my material and you can use it or not" (interview with NEPteacher).

#### **Results–Cross-cutting themes**

In the following, we present results from the second step of the analysis where we process several cross-cutting themes within each of the three categories in Kemmi's model. Dialogue and language are important and closely related themes that help constitute the semantic space. Physical framework and temporal resources emerge as elements that denote the material-economic space and important in the social-political space are themes such as organizational embedding and power relations, including symmetrical and asymmetrical relations.

#### **Dialogue and language**

The teachers in our study consider the opportunity for dialogue crucial to understanding, translating and interpreting each other's plans and teaching materials and to further developing teaching. Thus, dialogic interaction has become a culturally discursive support structure for a practice where teachers can exchange and come to an understanding. The teachers feel the need for conversation and engagement in dialogue with those they receive material from in order to translate and reuse it:

"... personally, I rarely think that it is from the slides themselves that I can read the big pedagogical things beyond a thread of communication [...]. I really like to share my things. I think that being able to share something, if there's just something someone can use or just that you can start a dialogue and get some feedback on it, then I think we qualify each other" (interview with BAP-teacher).

Thus, it appears that sharing practices, regardless of governance rationale or degree of formality, seem to be driven by dialogue, which also contains an element of equality. It becomes quite apparent that dialogue is qualifying for sharing practices and for the experience of pedagogical autonomy. This resonates with other research on pedagogical autonomy, which is considered a prerequisite for teachers to perform what we have previously referred to as context-sensitive teaching (Imsen, 2020). According to Bakhtin, dialogue facilitates construction processes in relation to already experienced and constructed knowledge. Through dialogue, one can become conscious of oneself through others. Dialogue personalizes content and constitutes meaning (Dysthe, 1995; 2003). However, dialogue also requires a common language, as previously mentioned. In both the TEP- and the NEP-case, the subjectoriented teams have developed a professional subjectspecialized language where the pedagogical considerations are partly merged with the professional jargon and partly expressed in everyday language.

#### **Material and time resources**

Generally, the four cases produce relatively little data about the importance of material-economical arrangements for sharing learning designs. However, some interesting accounts are made by the informants, especially about time resources.

Generally, when it comes to material and physical arrangements, the informants seem quite content with most kinds of facilities. There are suitable rooms for meetings with the necessary equipment, boards, and screens, as well as access to LMS platforms, etc. Regarding the way teachers are located and distributed physically, they do not find it extremely important that team members have a workplace in the same room. They can communicate online or visit each other when needed. Some informants find the informal spaces, such as the canteen or coffee rooms, just as important for sharing as more formal spaces.

When it comes to time, there seem to be two different kinds of time as a resource in sharing practices. One kind is the one you offer voluntarily, which is not registered or allocated anywhere:

"If I come and ask something, unless you are really busy, you usually make time to help. Or at least that if you can't right now and it's a bigger thing, then you typically want to be able to say, 'Well, do you have time to spend half an hour with me at some point to just talk about this?"" (interview BAP-teacher).

The second type is the time allocated and scheduled for teamwork. Some informants find that there is a lack of time specifically marked for sharing activities. Most commonly, the time for sharing should be taken from general preparation. However, other informants do not find formally allocated time the most important thing:

"I don't think it's the framework conditions but rather the benevolence among colleagues that supports sharing, so to speak. Because if it's those small, short sharings that don't require a lot of preparation, but maybe just a short sparring session, then it's more a question of having colleagues who are willing to do it, and maybe thereby be a little interrupted in their own work—knowing that they can also interrupt me another time." (interview BAP-teacher)

So, when sharing and exchange are self-directed and grow from below, there is a great willingness to spend time helping others knowing that you will get repaid another time.

# Organizational embedding, power relations and pedagogical autonomy

In this section, we highlight several cross-cutting themes that predominantly refer to the category of social-political arrangements of Kemmi's model. As the title indicates, they especially have to do with power relations, symmetrical and asymmetrical, in relation to pedagogical autonomy.

The organization and allocation of resources for collaboration and the power structures that follow facilitate different *action spaces* for sharing. This is particularly evident in the case of the Bachelor of Administration programme, where the informant states that "it's clearly the informal sharing culture that takes up the most space," but at the same time, formal processes and organization of collaboration are also referred to in the case. It seems that the two can co-exist. This theme is also found in the other cases, though not that explicitly, but it points to a general question of how sharing activities are initiated and controlled.

The overall theme of organizational embedment, therefore, comprises some sub-themes that we will now further elaborate. One of these themes is power relations, which particularly emerged in two cases in our so-called asymmetric and symmetric relations (Tanggaard, 2005).

The asymmetrical relationship typically occurs between one inexperienced/newcomer and an experienced colleague or a novice entering an established teaching team. However, there is a difference in power relations in the two situations. With the former, a kind of mentor-novice relationship is formed where the experienced teacher must guide/help an inexperienced one to understand and apply LDs. However, this is a close relationship based on trust, which is doublesided as far as pedagogical autonomy is concerned. On the one hand, the novice is dependent on the experienced colleague and needs relatively detailed guidance. On the other hand, the novice must also build her own understanding of an LD and thus wrestle herself free from the experienced to achieve satisfactory pedagogical autonomy.

We also find asymmetric connections between newcomers and especially subject-oriented teams. It requires a kind of socialization process for newcomers to become members of such a professional community (Lave and Wenger, 1998). An experienced team member thinks that such communities can seem dominating for newcomers, even if it is not the intention:

"And maybe some team communities have been a little too well-meaning in helping, you know, 'we used to do this and this and this.' But it wasn't meant as such, but more as, hey, do it like everyone else does it the first time, and later you can start to develop, but the person (newcomer, ed.) actually perceived it fairly...: 'why do I need all that material now? And why should I, because I won't use it', you know. It's like having something imposed on you. And I think that can inhibit you" (interview with an NEP-teacher).

The socialization aspect is also double-sided. On the one hand, you reap by becoming part of a team, but the team and its thinking, norms and routines can also seem overwhelming and limiting, so the team can be perceived as an external force that will push you more than it is beneficial. When, on the other hand, you have been integrated into the team, the relationship gradually becomes symmetrical. So, becoming a member of the team and complying with its practice traditions, norms and rules is not experienced as a limitation but as a resource that actually strengthens autonomy:

"There is a lot of pedagogical autonomy. It may well be that we have jointly formulated some things: that this is how we thought they should do [...] but for me, it is not a template that ties my hands and feet." (interview TEP)

The point is that once you are part of a community, especially the subject-oriented ones, sharing can take place completely unhindered among the members. This way, subject-oriented teams become a clear structuring element in the overall practice architecture that often enables sharing practices in which teaching has become a kind of collective ownership. However, such communities can close in on themselves and thus limit possible outsiders' access to them. At first, it could indicate greater pedagogical autonomy for the outsider, but being outside and thus cut off from the team resources is not the kind of pedagogical autonomy that teachers aspire to.

#### **Results—Practice architectures of sharing learning designs**

With this last analytical step, we shed light on what characterizes the practice architectures for sharing learning designs, whereby we further conceptualize what promotes and inhibits the sharing of learning designs, which is the main question of the article.

From the cross-cutting thematic analysis in the previous section, some special dynamics emerge between certain elements in the organizational embedding of sharing

practices. A special relationship crystallizes between what we term top-down versus bottom-up management rationales combined with a concept of formality. Top-down or bottomup are management rationales that indicate whether sharing practices are initiated from above or below and whether they have explicit goals and defined resources (Daradkah et al., 2018). As previously mentioned, bottom-up and topdown processes can take place side by side in the same organization.

The concept of formality is not dichotomous like the management rationales, but it is a continuum between lower and higher degrees of formality (high formality/low formality) (Eckert et al., 2013). The degree of formality deals with how explicit and detailed norms and values are exercised. It is the combinations of management rationales and degree of formality that constitute a special practice architecture regarding sharing practices:

- Top-down controlled sharing practices with a high degree of formality are initiated from above with centrally formulated goals. Sharing practices are highly regulated, ultimately with standardized learning designs in mind with limited autonomy for the teachers. Not found in data.
- Top-down controlled sharing practices with a low degree of formality are where only the overall goals for LD are determined from above, but where teachers develop the details of the LD and thus the degree of pedagogical autonomy. Found in BAP (catalogue for hybrid teaching).
- Bottom-up sharing practices with a high degree of formality are developed over time, where self-governing teams gradually form their own norms for sharing and thus become a community of sharing, etc. Found in TEP and NEP-cases.
- Bottom-up sharing practices with a low degree of formality grow from below. They are characterized by spontaneity, loose organization, a certain degree of randomness, but also a common understanding that it should be just that way.

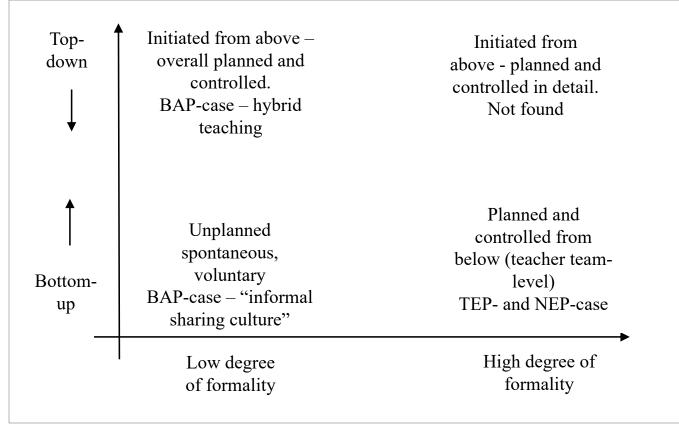


Figure 2. Top-down/bottom-up strategies combined with degrees of formality

Top-down and bottom-up strategies combined with different degrees of formality thus constitute a significant part of the practice architectures for sharing processes.

The question is what characterizes the shifts between the three intersubjective spaces according to Kemmis' model depending on whether sharing is top-down- or bottomup-driven: Obviously, the dynamics in the spaces are different with the two strategies. Goals and means are, to a greater extent, explicit and planned in top-downs rather than in bottom-ups. The latter is more ruled by implicit norms, values and routines in teaching teams, but also by spontaneous initiatives.

Most of the cases show that discursive cultural arrangements which support dialogue have been built around sharing practices. This applies to both top-down and bottom-up processes, but only as long as the top-down-initiated sharing practices exhibit a low degree of formality. Here, dialogue in teacher teams will still be able to take place on the premises of the team and thus be supported by discursive cultural arrangements. Therefore, possible changes in top-down sharing strategies towards a higher degree of formalization will challenge the practice architecture, especially the discursive-cultural arrangements as well as the sociopolitical ones. A detailed structuring from above will hamper dialogue in team communities and reduce the experience of pedagogical autonomy. This could also happen if cuts in time resources are implemented over time and thus reduce the opportunities for team dialogues. Ironically, the development of LD will then necessarily have to be regulated top-down. Again, this might threaten the pedagogical autonomy of the teacher teams as well as individually, but as mentioned, the combination of top-down and a high degree of formalization is not found in any of the cases.

## **Conclusion and perspectives**

This article has focused on the question of what promotes and inhibits sharing practices from teachers' point of view. The studies have shown that it is crucial for teachers to develop sharing practices that can open up pedagogical autonomy both for teams and for the individual. Based on four cases, we derived relevant themes such as symmetric vs. asymmetric relationships between teachers, strategies for sharing practice and language use. Subsequently, we carried out a cross-sectional analysis enacting Kemmis' model by which we extracted the common themes for the three intersubjective spaces. Finally, we summarized the characteristic features of the practice architectures that either support or inhibit sharing practices.

Practice architectures that matter most to sharing are especially those of subject-oriented teams. Here, sharing is fundamentally facilitated by a high degree of equal dialogue with colleagues and by a common understanding of a professional language. Having to follow the team's rules is typically not seen as a limitation of pedagogical autonomy but as a support for filling out one's space for pedagogical agency.

However, this implies that everyone is a full member of a team, whereby symmetrical relationships are established between the teachers. If one is outside the professional community, this can be experienced as dominant, and the relationship becomes asymmetric and inhibitory for empowering sharing. However, asymmetric relationships can be qualifying for sharing, for example, between an experienced and an inexperienced teacher with the purpose of quickly preparing for a new teaching situation. Here, the need for pedagogical autonomy takes a back seat in favour of being led.

Whether pedagogical autonomy is experienced at the team level or individual level is related to some socio-political arrangements that include top-down and bottom-up forms of regulation. To capture the sharing practices' complex interplay of power relations, pedagogical autonomy and management strategies, we have developed a map that combines management strategies with degrees of formality in the development and sharing of learning designs. Management strategies imply the spaces where the initiation and control of processes are carried out, while formality implies how detail-oriented the management is. Various combinations are possible (see Figure 2). An important point is that pedagogical autonomy can be well maintained in top-down controlled sharing practices if there is a low degree of formality, i.e. an overall regulation. Another important point is that top-down and bottom-up strategies can coexist in the same organization (BAP case). A well-balanced top-down management can, therefore, promote sharing and development processes alongside a bottom-up culture.

However, it should be noted that several of the bottom-up processes from the cases may go beyond the learning design concept, as they also deal with smaller parts of teaching than what can be described as "design."

Physical, material, and temporal arrangements do not seem to play a crucial role in the quality of sharing practices. Informal, spontaneous and intuitive exchanges in corridors and cafeterias, also across physical and material designs, are considered as valuable as the planned ones. A hindering factor seems to be the lack of specifically allocated time for sharing processes.

A question may be whether it is always beneficial and effective for teachers to engage in dialogic-sharing practices. If the top-down management becomes too controllingwhich, however, was not found in this study-it must be expected that this will inhibit the team-based dialogue. If a team's rules become too rigid and controlling, one can imagine that individual teachers' ideas for learning design development will be suppressed. In that case, it can ultimately damage the quality of learning designs and teaching. This problem is only hinted at in one of the cases, but it could probably be more widespread. Overall, however, our studies indicate that it is a good idea to let teacher teams be responsible for developing learning designs as the teachers seem to commit themselves strongly to the team's norms and values about teaching but still experience individual pedagogical autonomy. The extent to which our findings are generalizable to other teaching organizations will thus depend mostly on the sharing readiness in teacher teams rather than on the type of educational programme.

#### **Conflict of Interest**

There are no conflicts of interest to declare.

## **Note on Contributors**

Verner Larsen, PhD, Lecturer, Research Center for Pedagogy and Buildung, VIA University College, Aarhus, Denmark. vla@via.dk. Verner Larsen has extensive experience with educational research in higher education, especially polytechnic education programs. One of his main areas of research has been about disciplinarity and interdisciplinarity in Problem-based Learning. In recent years he has worked extensively with knowledge issues, especially concerning transformation of knowledge between research and teaching. He is particularly inspired by a sociological field of study in education, Legitimation Code Theory (LCT). In 2017, he became an Associate Member of LCT Center for Knowledge-Building.

Lisbeth Lunde Frederiksen, PhD, Head of Research Program Counselling and Mentoring. Iluf@via.dk. Lisbeth Lunde Frederiksen has more than 30 years of professional experience within research in the Danish education system. She is head of research at the Program for Guidance and mentorship at VIA University College in Århus, before this she has been head of a teacher education, head of the research programs for "Didactic for higher educations" and head of the research center" Profession and education". She is an expert in methods and approaches in educations. In her research, she has a strong focus on creating knowledge that can strengthen the didactics and teaching practice in higher education including relationship between theory and practice, interaction between profession and education, transition from education to profession, identity of the profession and educational leadership. In addition, she conducts research about counselling and mentoring, educational guidance in educational contexts. Lisbeth has since 2013 been appointed by the Ministry of Education as chairman of assessment committee for assistant professors at vocational colleges and vocational academies in Denmark. She has published more than 90 publications, books, newspaper articles and journals.

Thomas Iskov, Docent, PhD, Senior Associate Professor in the Research Center for quality in education, policy of professions and practice, VIA University College, Aarhus, Denmark. tisk@via.dk. Thomas Iskov has extensive experience in the field of professional development and educational research. His empirical research is qualitative and often exploratory and participatory. In addition, he works on pedagogical and educational theory development. His areas of interest include professional teaching and education for the welfare professions, professional theory and professionalism, student-centered learning, educational coherence, general pedagogy, integration of theory and practice, and more broadly, educational practices characteristic of the polytechnical model of education. He works on education development across various professional education programs, as well as on competence development and the teaching of teachers in vocational education.

#### **References**

Aspfors, J., Jakhelln, R., & Sjølie, E. (Eds.). (2021). Å analysere og endre praksis: teorien om praksisarkitekturer (1. udgave). Universitetsforlaget.

Bakhtin, M. (1981). *The dialogic imagination* – Four essays. M. Holquist (Ed.).

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Brinkmann, S., & Tanggaard, L. (2010a). *Kvalitative metoder – en grundbog.* Hans Reitzels Forlag.

Czarniawska, B., & Sevón, G. (1996). *Translating organizational change*. Berlin: Walter de Gruyter.

Daradkah, M., Jounidy, E. A., & Qusef, A. (2018). Top-Down vs. Bottom-Up in project management: A practical model. *ICEMIS '18: Proceedings of the Fourth International Conference on Engineering & MIS 2018*, No.: 11, 1–5. https://doi.org/10.1145/3234698.3234709

Davinia, H.-L., Harrer, A., Dodero, J. M., Asensio-Pérez, J., & Burgos, D. (2006). A Framework for the Conceptualization of Approaches to "Create-by-Reuse" of Learning Design Solutions. *Journal of Universal Computer Science, vol. 13,* no. 7 (2007), 750-760

Dohn, N. B., Godsk, M., & Buus L. (2019) Learning Design, tilgange, cases og karakteristika. *Tidsskriftet Læring og Medier (LOM)*, Nr. 21.

Dysthe, O. (Ed.). (2003). Dialog, samspil og læring. Klim.

Dysthe, O. (1995). Det flerstemmige klasserum. Skrivning og samtale for at lære. Klim.

Eckert, C., Stacey, M., & Earl, C. (2013). Formality in design communication. Artificial Intelligence for Engineering Design, Analysis and Manufacturing, 27, 91–103. Doi:10.1017/S0890060413000073

Goodyear, P. (2005). Educational design and networked learning: Patterns, pattern languages and design practice. *Australasian Journal of Educational Technology, 21*(1), 82–101. https://doi.org/10.14742/ajet.1344

Hedegaard, K. M., & Krogh-Jespersen, K. (2011). Didaktiske kategorier og udfordringer i professionsuddannelserne.
In K. M. Hedegaard & K. Krogh-Jespersen (Eds.).
Professionsdidaktik-grundlag for undervisning i professionsrettet uddannelse. Klim.

Imsen, G. (2013). *Lærerens verden: indføring i almen didaktik*. Nota. https://nota.dk/bibliotek/bogid/604440

Iskov, T., Larsen, V., Lunde Frederiksen, L., Henriksen, J. H., Nielsen, O., & Basballe, D. A. (2020). Undervisningsformater i videregående uddannelser. VIA UC. Kemmis, S. (2014a). *Changing practices, changing education*. Springer.

Kemmis, S., McTaggart, R., & Nixon, R. (2014b). *The action* research planner – doing critical participatory action research. Springer.

Larsen, V., Frederiksen, L. L., Iskov, T., & Henriksen, J. (2023). Læringsdesign i Videregående Uddannelse – Manual eller Inspirationskatalog?. Tidsskrift for Uddannelsesvidenskab // Danish Journal of Education Studies, 2. https://doi. org/10.7146/djes.v2i.131972

Lave, J., & Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Røvik, K. A. (2011). From fashion to virus: An alternative theory of organizations' handling of management ideas. *Organization Studies*, 32(5), 631–653. https://doi. org/10.1177/0170840611405426

Schatzki T, (2002). The site of the social. A philosophical account of the constitution of social life and change. Pennsylvania: Penn State Press.

Schön, D. A. (1991). *The reflective practitioner*. Ashgate Publishing.

Tanggaard, L. (2005). Collaborative teaching and learning in the workplace 1. *Journal of Vocational Education and Training*, 57(1), 109-122. DOI: 10.1080/13636820500200278 Tessmer M, & Wedman, J. (1995). Context-Sensitive instructional design models: A response to design research, studies and criticism. *Performance Improvement Quarterly* 8(3), 38-54

Wackerhausen, S. (2008). Refleksion. *Praksis og Refleksion,* 1, 1–21.

Wills, S., & Pegler, C. (2016). A deeper understanding of reuse: Learning designs, activities, resources and their contexts. *Journal of Interactive Media in Education*, 2016(1), 1–11.

Wiley, D. (2002). Å analysere og endre praksis: teorien om praksisarkitekturer (1. udgave). In J. Aspfors, R. Jakhelln, &
E. Sjølie. (Eds.). (2021). Universitetsforlaget.

Westbury, B., Hopmann, S., & Riquarts, K. (1999). Teaching as a reflective practice – The German didaktik tradition. New York, Routledge. https://doi. org/10.4324/9780203357781