

Mentors, Coaches, Managers, and More Experienced Others: Developmental Relationships in Complex Work Contexts and Novel Role Transition

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This study examines how developmental relationships between experienced others and mid-career professionals support them in navigating novel role transitions within complex work contexts. Based on qualitative interviews with strategy consultants in multinational firms, we examine how experienced colleagues enable confidence, clarity, and adaptability in role transitions. Framing learning transfer as a relational and developmental act, this paper directly addresses how mentoring relationships shape thriving performance and resilience in dynamic, high-change work environments. Drawing on developmental networks theory the Deliberately Developmental Organization model and cognitive apprenticeship we examine how developmental relationships enable working learners to apply prior knowledge in new roles. These relationships function as a scaffold supporting not only performance but also identity and professional confidence during transitions. We interviewed early- to mid-career strategy consultants across two firms focusing on role transitions, developmental relationships, and experiences of learning transfer. An emergent and abductive thematic analysis approach balanced emic insights with theory creation. Five coders collaboratively developed, refined, and validated a codebook that captures the core features of effective mentoring relationships, which foster novel role transitions in consulting contexts. Three developmental practices stood out as supporting not only learning but also psychological safety, confidence, and a sense of shared accountability.

Keywords: Developmental relationships, experienced others, mid-career professionals, role transitions, learning transfer

Introduction

In this study, we examine how working learners rapidly transition to new roles by adopting a sociocultural perspective on learning transfer that extends beyond traditional cognitive frameworks. (Pea, 1987; Voss, 1987; Chin et al., 2019). This socio-cultural view, allows us to consider the role of the developmental relationships (Higgins & Kram, 2001; Kegan et al., 2016) that offer cognitive apprenticeship and legitimate peripheral participation (Lave & Wenger, 1991; Dennen & Burner, 2008; Collins & Greeno, 2010) as an element of the socio-cultural context interacting with learning transfer. More specifically, by examining the role of developmental relationships in facilitating learning transfer among working learners in consulting firms, this research aims to describe the features of developmental relationships during role transitions. Consulting firms were identified as a context where this kind of rapid role and task disruption is already the norm and, therefore, a place to develop deep insight into what is working and what is not. Using semi-structured interviews with 75 early to mid-career strategy consultants from two multinational firms, we explored participants' role transitions, their experiences with managers and experienced

others during these transitions, and how they transferred learning across different contexts. An abductive thematic analysis approach allowed us to balance emerging themes with existing theoretical frameworks, providing a rich understanding of the phenomenon. Our findings contribute to the growing body of knowledge on workplace learning and have implications for educational researchers and professionals in learning and development. They also inform a broader workforce understanding of how to support working learners and learning workers in novel role transitions. This paper presents the study's context, methodology, and key findings, and discusses their implications for theory and practice in supporting learning transfer in organizational settings.

Literature Review: Conceptual Background

Learning Transfer is the cognitive process of using knowledge, abilities, or skills learned in one setting and applying them in another (Perkins & Salomon, 1992; Bransford et al., 1999). Through this lens, we consider learning to transfer to be a socio-cultural process that involves negotiation, interpretation, and integration between a learner's previously learned knowledge, skills, and abilities, the novel problem, and the sociocultural context

of the novel problem (Pea, 1987; Voss, 1987; Chin et al., 2019).

Central to this sociocultural view of learning transfer is the recognition of the significance of developmental relationships in learning across the lifespan. Drawing on Vygotsky's (1978) concept of the Zone of Proximal Development and Bronfenbrenner's (1979) ecological model, we recognize that developmental relationships and supportive environments are crucial for helping learners surpass their current capabilities. Developmental networks theory (Higgins & Kram, 2001) and the Deliberately Developmental Organization model (Kegan et al., 2016) extend this perspective into workplace contexts.

Similarly, cognitive apprenticeship (Lave & Wenger, 1991; Dennen & Burner, 2008; Collins & Greeno, 2010) reinforces how guided experiences and participation within developmental relationships and communities of practice can enhance learning. These models emphasize the significance of developmental relationships in promoting successful learning and recognize the vital role that experienced individuals play in supporting the learning of junior team members.

The critical role of experienced individuals and developmental relationships is also emphasized in research on knowledge transfer within organizations. While it is clear that knowledge transfer between the experienced other and team members is an important part of workplace learning as described by Argote (2024) and Swap (2001), so too is learning transfer within the mind of the individual team member as described by Perkins and Salomon (1992), Bransford (1999), and Pea (1987) to bring forward their previously learned knowledge, skills, and abilities to approach the novel problem.

This study focuses specifically on developmental relationships, recognizing that while individual learners and organizational contexts are both

essential parts of this puzzle, consulting teams - specifically the relationships between team members and their managers, career coaches, and mentors - represent uniquely powerful contexts for learning transfer. This framing leads us to a key question: What characterizes the relationship between a working learner and their experienced colleague as the learner transitions into a new, unfamiliar role that requires transferring and applying their existing knowledge, skills, and abilities to a novel context?

Methodology

Participants

This study involved partnerships with the Chief Learning Officer of two multinational consulting firms, which allowed us to recruit 75 early to mid-career strategy consultants from their organizations. Participants were identified through a convenience sampling method, where information about the study was disseminated to the target population via email lists, messaging applications, and team meetings. Interested participants were invited to join an FAQ video conference with the research team and were given the opportunity to sign up. Sign-up was blind to the partner organizations. To be included, participants needed to be based in North America, a member of each of the firm's consulting service lines, and currently in a role that was one level above an entry-level position.

The participants had an average of six years in their consulting roles at the respective organizations, although their tenure ranged from approximately 18 months to 20 years. During their tenure at the firm, each participant had completed an average of eight novel role transitions. Interestingly, the roles participants described participating in during their career trajectories

Table 1:
Sixteen Novel Roles Mentioned in Participant Data

varied significantly from a typical career path

Zoom. With their permission, each interview was

A random sample list of 16 individual role titles mentioned in the participant data			
Agile Coach	Scientific Informatics Analyst	Metaverse Experience Designer	DEI Facilitator
Inventory Optimization Analyst	Sales Associate	Homelessness Strategist	Pharma Operations Specialist
App Developer	Environmental Sustainability	Venture Capitalist	Gamification Designer
Legal Paperwork Preparer	Call Center Operator	Talent Strategist	Cloud Solution Architect

Data Collection

Each participant participated in a 60-75 minute interview via the video conferencing platform

recorded in Zoom and then transcribed using Rev. com. Interviews were semi-structured to strike a balance between obtaining specific information about role transitions within the organization and allowing participants to share emerging themes

and insights they wanted to reveal (Weiss, 1994). Interviews involved four phases. Firstly, they started with overarching questions about the participants' journeys to their jobs at the consulting firm. After establishing rapport (Glesen & Peshkin, 1992), the second phase explored participants' specific chronological role history since joining the firm. In the third phase of the interview, double-click on the specific details of the transitions between each of those roles and have participants recall exact events and moments. Finally, the interview ended with a series of hypothetical scenario questions about possible future transitions they, or someone they mentor, may face. While relying on historical accounts of a participant's insights can introduce bias, this methodological choice offered the ability to gain a deep understanding of how participants make meaning of their varied roles and the transitions between them, while also serving as a magnifying glass over particular practices that they took notice of.

Data Analysis

We conducted an abductive thematic analysis (Tavory & Timmermans, 2014), focused on identifying codable moments (Boyatzis, 1998) that might help surface emergent insights into how learning transfer is supported. Abductive analysis allows for themes to emerge inductively from the data while also considering a priori theoretical perspectives. This supports the process of

inference in developing new hypotheses and theoretical insights based on patterns across the dataset (Timmermans & Tavory, 2014; Fann, 1970). As McKaughan (2008) describes, this approach enables researchers to make "judgments about the relative pursuit worthiness of theories," which is well suited to the qualitative phase of a broader design research project.

We began our first round of coding with open coding, looking for codable moments and early, emergent ideas. Then we used a collaborative digital whiteboard tool to organize and cluster those insights into thematic groupings, and worked iteratively to refine these clusters. Through this process, we identified four key features (Costa & Morelli, 2018) of the developmental relationships described by people navigating learning transfer and role transition. Based on these themes, we developed an initial codebook (see Table 2) and applied it across the dataset through a second round of coding.

Next, we brought on two new coders, each of whom independently coded half of the transcripts in our third coding round. This involved collaborative coding and robust discussion, which helped evolve the codebook into a more consistent tool. To check reliability, two coders cross-coded a subset of each other's transcripts. Finally, in the last round of coding, a third coder, who had not participated in earlier rounds, used the revised codebook to independently code a random selection of ten transcripts, further assessing consistency. This

Table 2
Code Book Excerpt

Code:	Definition:	Quote Example:
Leverage their team's past experiences.	Managers identify skills from their own or their team's previous roles or projects that are relevant to the task at hand, and communicate these insights with the team.	"So, what I found myself doing anything with counselees is oftentimes and in this specific example to make it more relatable, is saying, Hey, look at the things we think about from that previous project and now shift those let's figure out there's a gap between the old rule and the new rule and shift that thinking."
Share examples of work products.	Managers share example work products with their teams, which can be used to create a mental model of the final product or as a starting point. This can be a finished or draft work product.	"I find I send a lot of templates or previous client examples to help people learn. And I mean, my thing is we should never be creating something from scratch. And so what can we share to help people learn and gain kind of skills, experience, and knowledge really quickly?"
Engage in joint attention on tasks.	Managers work through tasks together with their team. This can look like shadowing and giving live feedback in the flow of work.	"He would start going through on like, 'All right, so here's the title. Who does it affect? What's the level of change?' and he would go through about 20 of those, and then I would take the rest of them."
Facilitate open and consistent communication.	Managers communicate with their teams on a regular basis and ensure that their lines of communication are always open for questions, advice, and direction.	"I will work with that person, and it's not a one-time call. I always make it a point that know that this is not the only call, we should be meeting every week and then every two weeks. So that way you feel comfortable."

iterative and collaborative process led to the identification of four developmental practices that supported not only learning but also psychological safety, confidence, and shared accountability.

Discussion of Findings

Experienced Others Model Transferring Knowledge, Learning, Work Products, and Experiences to Novel Contexts

A set of features emerged across more than 75% of the 75 transcripts describing the essential role experienced others play in modeling the transfer of knowledge, learning, and experiences to new and novel roles, tasks, and contexts.

They Show Their Team Members how Past Experiences Apply in the Novel Context

A little over 50% of participants specifically highlighted how when managers draw upon either their or their team's experiences to model learning transfer, it becomes more accessible. Here, one participant describes that connection: She related my story to hers, and told me these are the things I would do.

This practice is also seen as very valuable by managers who would work with their team members to specifically draw out the aspects of their past experiences that are relevant and can be applied to the current experience. In some respects, these managers engage in an expansive post-learning framing (Engle, 2012) that helps their team members reflect on prior roles and consider broader applications that might apply in the novel context. Here, three managers discuss connecting the current novel work to prior contexts:

So, what I found myself doing in this specific example to make it more relatable, is saying, Hey, look at the things we think about from that previous project and now shift those let's figure out there's a gap between the old rule

and the new rule and shift that thinking."
"I am tying all of the new information back to their existing experience.

And so what I talked with him a lot about was going back to the previous experience, putting himself in his manager's shoes on that project. So hey, here are the five things you'd be thinking about on a daily basis when you're in this Python developer role, but what do you think your manager was thinking about as you were doing those things, right? So sometimes he might have been thinking about how to solve the technical problem, but other times he was thinking about how this mattered in the client context, et cetera, et cetera. And so I think tying the new role to something that the fact that he had very tangible experience with is a helpful tactic.

By drawing parallels between past experiences and current challenges, these managers serve as bridges for their learners, helping them connect valuable insights from previous roles to new

situations and highlighting that it is, in fact, possible to transfer learning and knowledge from prior roles into a novel one that can at first appear very diverse. This echoes findings from corporate mentoring research showing that mentors serve as sense makers (Bryant, 2005)

They Share Example Work Products to Help Their Team Members Understand the Target

Another technique experienced others often employ is sharing examples of work products with their less experienced team members; about 42% of transcripts discussed this feature. Several team members described how their managers share templates, reference materials, or examples for them to orient themselves around in a novel role or context:

They were always giving me some type of reference material that, so I wouldn't necessarily have to create things from scratch... They would show me a couple of times, 'Hey, this is how I would do it.

"This role, for example, my manager had a lot of templates or things that we were already using, and I had to pick up and start using or start running myself.

In doing so, their manager fostered the rapid learning process by providing a starting point for them in the novel task. As one manager highlighted, providing team members with reference materials means that they never have to "create something from scratch" and that they can build competency quickly:

We should never be creating something from scratch. And so what can we share to help people learn and gain kind of skill, experience, and knowledge really quickly?

This practice also modeled for learners how they can use existing materials as a mechanism for transferring in learning. Here, a participant discusses an example of using an existing project plan for another project:

I had this project plan that I made when I was a consultant, that I can say, oh, let me just dust this off. And I've got a starting point. So, I'm not starting from scratch, and it was like the confidence of knowing I'd seen bits and pieces of this before.

By showing the end state of past work products, experienced others clarify the starting point and the end product of the novel task to the less experienced teammates and, therefore, support a faster transfer of learning and knowledge by the team members. According to Grotzer and Forshaw (2021), any effective transfer process involves four essential stages - learning, cueing, mapping, and applying. In this case, team members have had prior learning experiences and built knowledge in other contexts. When they receive an example of the work product, they are signaled to retrieve what they already know that is relevant to the task (cueing). Next, the example work products help them engage in analogical mapping (Pea, 1987) and to reason between the sameness and

difference in their existing knowledge with the end product to identify what they should bring forward to help them (mapping) and eventually follow through to use what they have learned to the new context (applying) (Marton, 2006).

Experienced others intentionally promote active collaboration between themselves and their team members.

A second set of features also emerged across 95% of the 75 transcripts, describing the essential role that experienced others play in enabling collaboration and communication, and how this enablement is crucial to crafting the conditions in which the frequent transfer of learning to novel roles and tasks can occur. We saw these insights shared from both the perspective of the team members and the experienced others.

They Foster Open and Consistent Communication with Their Team Members.

Experienced others describe their approaches to actively facilitating regular and supportive communication in their developmental relationships with team members. This can look like arranging regular meetings to respond to questions, provide feedback, and provide guidelines for the less experienced individual in the flow of work:

"I connect with the team every single day, and we're always in sync and we all support each other in the way ... We support each other as in we know we're all working towards the same goal."

"We'd connect at least twice a week, sometimes three times a week, and we would use that time to coach her through. If we had a new deliverable that we're working on, then I would try to provide her with an example one and then say, "Can you work on this part?"

Experienced others also mention tailoring their guidance and mentoring to individuals' experiences and needs. Regular and open communication contributes to trust building between experienced others and team members and eases addressing the possible obstacles the less experienced may encounter. One participant describes how they ensure that they know ongoing communication is the way forward:

I will kind of work with that person, and it's not a one-time call. I always make it a point to know that this is not the only call; we should be meeting every week and then every two weeks. So that way you feel comfortable, and that is that tailored mentorship or whatever word you wanted to call, guiding someone along, definitely have gotten some great feedback around their experience of onboarding quicker.

Similarly, team members recall their experiences of maintaining regular and open communication with supportive leaders who facilitated such an active learning space and time for transfer to happen:

I've had very supportive leaders across each of my projects, and they give me the space to try things and learn things on my own

before giving me the space to do that, and allowing me to come to them with either my reflections, or, "I've taken a pass at completing this assignment, what are your thoughts," and giving me feedback.

The importance of open and consistent communication, led by experienced others, as a mechanism for encouraging learners to thrive in novel problem-solving contexts was highlighted by 84% of research participants. Participants' discussion of this feature as important aligns with insights from the Deliberately Developmental Organization (DDO) model proposed by Kegan et al. (2016), emphasizing the importance of nurturing trustworthy relationships.

They Take the Time to Engage in Joint Attention on a Task with Their Team Members

Approximately 79% of all participants, including some team members, managers, and both, emphasized the importance of engaging in joint attention on a novel task. Team members describe their experiences interacting with others in collaborative problem-solving sessions, receiving teaching, modeling, and coaching from experienced others on the task's progress. By doing so, their experienced others were fostering environments conducive to feedback and discussion, which are formative in facilitating learning transfer.

The way he would do it is let's say the client, there's two or three of them, and then he would have the document, for example, change impacts. He would start going through on like, "All right, so here's the title. Who does it affect? What's the level of change?" and he would go through about 20 of those, and then I would take the rest of them. So basically he would do it, I would see it, take notes on how to do it, and then I would mimic it, I guess, the general process. Of course, in my own words and everything, but that's the general direction, I guess, see, do.

We have a heavy emphasis on PSing, which means problem solving with leadership - it's sharing your thoughts and reflections so that they can provide guidance... the purpose of it is for the more junior folks who are owning a work stream or a problem statement, you will present your findings or your questions, and that's an opportunity for the entire team to react to what you put in front of them. So let's say we're doing a study where we have to, even this study, 'How do we understand how people actually learn on the job?' Then I would put my thoughts on a page and ask everyone's opinions and say, 'Hey, this is what my findings are, here's where I'm stuck, here's where I can use your help.' And after that session, I take all the feedback, I iterate upon my hypothesis, and then that process continues.

Team members shared that they consider learning directly from leadership to be greatly valuable, as it allows them to cognitively model the paradigm solutions to problems through observing, asking questions, sharing thoughts, and eventually iterating and innovating in the

workstream.

I had a team that was on the ground with me, in particular an MD, a managing director in the space, who was able to help coach me and work with me. I mean, we actively were brainstorming together and doing a lot of things together. Otherwise, that project would've been really, really hard.

Equally, those performing experienced others' roles describe modeling the problem-solving process for team members, providing advice and feedback in real-time, as well as independent problem-solving opportunities when they engage in joint attention with team members on tasks.

Lately, I've translated it, so now everyone on the team talks about a deliverable that they have. So that's just one of the programs that we have, but on a more one-on-one basis, I usually walk through the process. If we're going over deliverables, I'm like, "All right, so this is how we're going to go over. Do you want to try explaining it?" and that way, before we go to the client, they're ready when they present. And I'm always there in the background if I need to jump in at all, so that's my overall process.

This practice of situated learning, where experienced others engage collaboratively in an activity system with a team while offering guided participation, bolsters transfer (Greeno & Engeström, 2013). It also aligns with the foundational principles of cognitive apprenticeship, where learners are situated in an authentic workflow and acquire new skills and knowledge by becoming part of a community of practice (Dennen & Burner, 2008; Collins & Greeno, 2010).

Discussion

This study highlights learning transfer as a sociocultural learning process fostered by socio-developmental relationships within sociocultural contexts. These findings further theories that push beyond transfer as a solely cognitive process within an individual's mind to understanding it as a socially embedded and culturally mediated phenomenon (Pea, 1987). It especially suggests that, for these participants, the relationship between a working learner and an experienced other, such as a team member and a manager, plays a pivotal role in modeling knowledge transfer and supporting learners in applying past experiences to novel contexts.

This underscores the need for education researchers to focus on the quality and nature of developmental relationships in learning environments, shifting views of these relationships from primarily managerial to also ones that can play a fundamental role in a person's ability to transfer knowledge into a novel context and perform a new role or task. This shift in view calls for us to reinvigorate the call to promote tailored mentorship, modeling, open and constant communication, scaffolding, and active learning spaces (Kegan et al., 2016). Similarly, learning and

development professionals might consider further emphasizing the role of managers as facilitators of learning in sociocultural and applied work settings. By focusing on developing managers to support their team members' ability to transfer learning across contexts, their workforce can become more agile and resilient.

Conclusion

Finally, it is important to highlight that this study has several limitations. Most notably, the study's data collection method relied on interviews where participants recalled past experiences, which opened up the potential for recall bias, and lacked direct observational data. To best address this concern, we utilized a sample size on the larger side of qualitative research norms and asked participants questions in multiple ways to verify consistency. A further limitation is that the study focused exclusively on consultants from two multinational consulting firms. This narrow focus on a specific type of organization may limit the generalizability of the findings to other professions.

References

- Argote, L. (2024). Knowledge transfer within organizations: Mechanisms, motivation, and consideration. *Annual Review of Psychology*, 75, 405-431.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Sage Publications, Inc.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (1999). *How people learn: Brain, mind, experience, and school*. National Academy Press.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. *Harvard University Press*, 139-163.
- Bryant, S. E. (2005). The impact of peer mentoring on organizational knowledge creation and sharing: An empirical study in a software firm. *Group & Organization Management*, 30(3), 319-338.
- Chin, D. B., Blair, K. P., Wolf, R. C., Conlin, L. D., Culumisu, M., Pfaffman, J., & Schwartz, D. L. (2019). Educating and measuring choice: A test of the transfer of design thinking in problem solving and learning. *Journal of the Learning Sciences*, 28(3), 337-380. <https://doi.org/10.1080/10508406.2019.1570933>
- Collins, A., & Greeno, J. G. (2011). Situative view of learning. *Learning and Cognition in Education*, pp. 64-68.
- Costa, N.; Patricio, L.; Morelli, N., (2018) "A designerly-way of conducting qualitative research in design studies," SERVDES 2018

- Proof of Concept, June 10-13, Milan, Italy
- Dede, C. (2018, October 19). The 60-year curriculum: The 60-year curriculum: Developing new educational models to serve the agile labor market. The Evolution. https://evollution.com/revenue-streams/professional_development/the-60-year-curriculum-developing-new-educational-models-to-serve-the-agile-labor-market/
- Dennen, V. P., & Burner, K. J. (2008). The cognitive apprenticeship model in educational practice. In the *Handbook of research on Educational Communications and Technology*, 425-439. Routledge.
- Engle, R., Lam, D., Meyer, X., & Nix, S. (2012). How does expansive framing promote transfer? Several proposed explanations and a research agenda for investigating them. *Educational Psychologist*, 47(3), 215-231, doi: 10.1080/00461520.2012.695678
- Garvey Berger, J. (2011). *Changing on the job: Developing leaders for a complex world*. Stanford University Press.
- Greeno, J. G., & Engeström, Y. (2006). *Learning in activity*, pp. 79-96. a.
- Grotzer, T.A., & Forshaw, T. (2021). How next-level learning enables a more powerful vision for transfer. The Next Level Lab at the Harvard Graduate School of Education. President and Fellows of Harvard College.
- Grotzer, T. A., Powell, M. M., Courter, C. J., Kamara-inen, A. M., Metcalf, S. J., & Dede, C. J. (2015). Turning transfer inside out: The affordances of virtual worlds and mobile devices in real-world contexts for teaching about causality across time and distance in ecosystems. *Technology, Knowledge and Learning*, 20(1), 43-69.
- Grotzer, T. A., Gonzalez, E., & Forshaw, T. (2021). What is next level learning, and why does it matter?
- Creative Teaching and Learning. Advanced online publication. <https://www.teachingtimes.com/in-a-world-in-flux-next-level-learning-is-critical-but-what-is-it-and-why-does-it-matter-so-much/>
- Higgins, M. C., & Kram, K. E. (2001). Reconceptualizing mentoring at work: A developmental network perspective. *Academy of Management Review*, 26(2), 264-288.
- Kegan, R., & Lahey, L. L. (2016). *An everyone culture: Becoming a deliberately developmental organization*. Harvard Business Review Press.
- Kubricht, J. R. Lu, H. & Holyoak, K. J. (2016). Individual differences in spontaneous analogical transfer. *Mem Cogn* 45, 576-588. <https://doi.org/10.3758/s13421-016-0687-7>
- Lobato, J. (2012). The actor-oriented transfer perspective and its contributions to educational research and practice. *Educational Psychologist*, 47(3), 232-247.
- Pea, R. (1987). Socializing the knowledge transfer problems (Report No. IRL89-0009). Institute for Research on Learning.
- Pea, R. D. (2004). The social and technological dimensions of scaffolding and related theoretical concepts for learning, education, and human activity. *The Journal of The Learning Sciences*, pp. 423-451.
- Perkins, D. N., & Salomon, G. (1992). Transfer of learning. In T. Husén & T. N. Postlethwaite (Eds.), *The international encyclopedia of education* (2nd ed., pp. 425-441). Pergamon.
- Swap, W., Leonard, D., Shields, M., & Abrams, L. (2001). Using mentoring and storytelling to transfer knowledge in the workplace. *Journal of Management Information Systems*, 18(1), 95-114.
- Voss, J. F. (1987). Learning and transfer in subject-matter learning: A problem-solving model. *International Journal of Educational Research*, 11(6), 607-622.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (Vol. 86), 79-91. Harvard University Press.
- Zhu, Y., Leong, V., Hou, Y., Zhang, D., Pan, Y., & Hu, Y. (2021). Instructor-learner neural synchronization during elaborated feedback predicts learning transfer. *Journal of Educational Psychology*.