

Team Development and Experiential Learning

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ABSTRACT: This paper explores the intersection of Tuckman's Team Development Model and Kolb's Experiential Learning Cycle, analyzing how these frameworks can be integrated to enhance team effectiveness and individual learning within educational and organizational contexts. Tuckman's model outlines the stages of team development—forming, storming, norming, performing, and adjourning—each critical for building cohesive and productive teams. Kolb's cycle, consisting of concrete experience, reflective observation, abstract conceptualization, and active experimentation, provides a robust framework for understanding how individuals learn from their experiences. By synthesizing these models, this paper demonstrates how teams can navigate developmental stages while simultaneously fostering individual growth through experiential learning. Practical applications and case studies illustrate how combining these models can lead to improved teamwork, enhanced problem-solving abilities, and increased overall performance.

KEYWORDS: Tuckman's Team Development Model, Kolb's Experiential Learning Cycle, team dynamics, team effectiveness, individual learning, educational frameworks, team building, team roles.

Introduction

Most organizations place a strong emphasis on teamwork as a productive way of working, believing that collaboration among individuals can lead to better outcomes. As Belbin (2004, xx) aptly puts it, "the whole can be greater than the sum of its parts," highlighting, therefore, the potential of teamwork to surpass individual contributions. This perspective underscores the inherent value of diverse skills and perspectives coming together to achieve common goals. However, the notion that teamwork is always the optimal strategy is contested. Robins and Finley (1998, 181) caution that teams are not universally beneficial, especially when "mandatory teaming is misapplied team enthusiasm." They argue that forcing teamwork where it is neither needed nor desired can lead to inefficiencies and reduced enthusiasm. Indeed, teams that are established without genuine interest or necessity for collaboration may be disadvantaged from the outset. In such scenarios, individual work might prove to be more efficient and effective.

The purpose of this paper is to explore the strategic role of teamwork, examining its benefits and challenges. The discussion will tackle key theoretical issues related to the efficacy of teamwork theories. It provides a short review of existing literature, analyses the impact of teamwork and learning outcomes, and offers a few recommendations for educators. Through this exploration, the paper aims to provide insights into whether teamwork can be considered an effective strategy for learning environments and under what conditions it is most beneficial.

Defining Team Development

Different authors have described the various stages of team development in different ways. For example, Stott and Walker (1995) outline the following four stages: polite niceties, politicking, achieving, and competence (producing). However, the model proposed by Bruce Tuckman (1965) continues to prevail in most studies. Tuckmann (1965, 384–399) first argued that there are four stages of team development: forming, storming, norming, and performing. Moreover, in a subsequent article, he added a fifth stage, which he named "adjourning" (Tuckman and Jensen 1977, 419–427). Since then, this model has become the foundation on which most subsequent studies of group dynamics and team development have built their argument. Both articles are widely referenced in academic and practical contexts, and although terminologies differ, the descriptions of development stages provided by most authors correspond to the way Tuckman has

described them in his studies. Thus, in the definition provided below, Tuckman's model will primarily be used to describe the dynamics of teamwork.

Forming

In the forming stage, team members are selected and brought together, often without a specific strategy behind their selection. For example, in an educational context, team members may be chosen randomly by a tutor, with no particular criteria taken into consideration. This randomness in forming teams is not necessarily a disadvantage, as it can allow for a diverse range of perspectives and skills, which can be beneficial for successful teamwork. The key at this stage is for members to get acquainted and start building the foundation for collaboration. During this stage, team members are introduced to one another and begin to understand the team's purpose and structure. They learn about each other's backgrounds, skills, and personalities. Therefore, this phase involves a lot of orientation and information gathering about the team's goals and individual roles.

This phase is characterized by a high level of uncertainty and a low level of productivity as members are just starting to get acquainted and establish relationships. There is often a sense of uncertainty and anxiety among team members as they are unsure about their place within the team and how they will fit in. This can lead to cautious and polite interactions, which minimize the opportunity for conflict. The focus is on building relationships and understanding the team's framework. Members test the boundaries of acceptable behavior and the team's operational framework. They begin to explore how they can contribute and what the team's norms will be.

During this phase, initial roles and responsibilities are defined, although these may not be fully clear or accepted by all members. The team leader often plays a significant role in guiding this process and providing direction for decision-making. The leader's role, therefore, is crucial in setting the tone and establishing the initial structure and expectations. Also, it is within this stage that the team starts to discuss and understand the goals and objectives of the project or task at hand. This involves defining the mission, setting initial milestones, and agreeing on the scope of work.

In summary, the forming stage of Tuckman's team development model is where team members come together for the first time, establish initial relationships, and start to understand their roles and the team's goals. This stage lays the groundwork for the team's future development and is essential for setting a positive and productive trajectory for the team's journey through the subsequent stages of development.

Storming

The storming stage is characterized by addressing key questions about team goals, roles, responsibilities, decision-making processes, and the strengths and skills of each team member. According to Robbins and Finley (1998, 1993), these questions are crucial for moving past initial conflicts and misunderstandings. In some cases, a formal storming stage may not occur. For instance, team members might exchange personal thoughts on the project and discuss how to proceed without directly addressing all the issues above. Leadership during this stage can be fluid, with different members taking the lead on tasks they are most suited for, embodying what Belbin (2000, 17, 35, 44–45) describes as "rotating" leadership. This approach allows informal leaders to emerge based on the team's needs at any given time.

The storming stage can be full of conflict and competition as team members begin to assert their individual personalities, perspectives, and ideas. It is a critical period where the team works through disagreements and tensions to build a more cohesive and functional unit. Conflicts and disagreements are a natural part of the process as individuals start to express their true selves and vie for position within the team. The competition often has in view the establishment of roles, status, and leadership within the team, but also the clarification of

team goals, objectives, and tasks, as well as norms and standards of behavior. Emotions can run high during this stage, with feelings of frustration, anxiety, and resentment being common. However, this emotional energy can also be a catalyst for growth and development if managed effectively. This is so because the storming stage can bring a wealth of diverse opinions and ideas to the forefront, which can lead to creative solutions and innovations.

In summary, the storming stage of Tuckman's team development model is a period of conflict and competition where team members assert their individuality and negotiate their roles and norms. While challenging, this stage is essential for developing a cohesive and high-functioning team. Effective management of this stage can lead to stronger relationships, clearer roles, and a more collaborative team environment as the team progresses to the next stages of development.

Norming

During the norming stage, team members begin to build constructive relationships and establish norms for how they will work together. In some cases, such as in virtual teams, this stage may be facilitated by opportunities for face-to-face interaction, even if brief, which can help in better connecting and building rapport. For example, a tutorial meeting where team members can match names with faces can significantly enhance the sense of connection and teamwork. Team-building efforts can be structured or unstructured (cf. Wallace and Huckman 2002, 240); in short-term projects, the commitment to fulfilling an academic assignment often compensates for the lack of formal team-building activities.

During this phase, the team begins to establish a sense of cohesion and unity, following the often turbulent storming stage. During norming, team members resolve their differences, appreciate each other's strengths, and respect the authority of the leader. This stage is crucial for building a cooperative and harmonious team environment, setting the foundation for optimal performance in the subsequent performing stage. Thus, the norming stage is where teams establish norms, or agreed-upon standards of behavior and procedures. These norms guide interactions and decision-making processes, helping to create a structured and predictable environment. In this way, team members develop stronger relationships and a sense of camaraderie. Trust and mutual respect grow, leading to improved cooperation and collaboration. Also, roles and responsibilities become clearer and more accepted. Each team member understands their specific contributions to the team's goals, reducing confusion and overlap and improving communication. Team members feel more comfortable sharing their ideas, giving feedback, and addressing issues openly, which leads to more effective problem-solving and decision-making.

There is also a stronger commitment to the team's goals and objectives. Members are more aligned with the team's mission and are motivated to work towards common goals. Collaboration and teamwork become more natural and efficient. Members are more willing to support each other and share resources to achieve the team's objectives. Consequently, the team leader's role may become more facilitative as the team members take on more responsibility for managing their own processes and dynamics. Leadership may become more shared or distributed.

In summary, the norming stage of Tuckman's team development model is where the team begins to function more smoothly and cohesively. By resolving conflicts, clarifying roles, and establishing norms, the team creates a supportive environment that facilitates effective collaboration and sets the stage for optimal performance in the performing phase.

Performing

In the performing stage, the team operates efficiently towards achieving its goals. Tasks are typically distributed on a voluntary basis, with each member contributing and providing feedback on others' contributions. Healthy discussions and compromises help resolve differences of

opinion, fostering a collaborative environment. For instance, in an online teamwork scenario, members might engage in constructive exchanges to clarify differing viewpoints, thereby enhancing the overall quality of the project. While competitiveness can arise within teams, it is generally more productive when directed externally against other teams, driving higher standards and better performance. However, a lack of motivation for external competition might result in a cooperative rather than competitive team culture.

The performing phase represents the pinnacle of team maturity and functionality, where the group has evolved through the earlier stages (forming, storming, and norming) and is now operating at its highest level of efficiency and effectiveness. During this stage, the team is characterized by a strong sense of cohesion, purpose, and productivity. Members work collaboratively and efficiently towards their goals. They are able to complete tasks on time and to a high standard, often exceeding expectations. There is a strong sense of trust and mutual respect among team members. They understand and appreciate each other's strengths and weaknesses, and this mutual understanding fosters a supportive and cooperative environment. The team functions with a high degree of autonomy, requiring minimal supervision. Members are capable of making decisions independently and adapting flexibly to changing circumstances and new challenges. Consequently, the team excels in problem-solving and decision-making processes. They can identify issues quickly, discuss solutions openly, and implement decisions efficiently. This capability is enhanced by the diversity of skills and perspectives within the team.

In this stage roles and responsibilities are clearly defined and well-understood by all team members. This clarity helps prevent overlap and conflicts, allowing each member to focus on their specific tasks and contribute effectively to the team's objectives. This results in a high team morale, with members feeling motivated and committed to the team's success. This positive energy often leads to increased creativity and innovation, as team members feel empowered to contribute their best ideas. Communication within this phase is open, honest, and effective. Information flows freely, and members feel comfortable sharing their thoughts and feedback, leading to better collaboration and more informed decision-making. The team is focused on achieving its goals and is consistently successful in meeting or exceeding them. They have a clear understanding of their objectives and work diligently towards their attainment.

In summary, the performing stage of Tuckman's team development model is where the team achieves peak performance through effective collaboration, trust, and shared commitment to common goals. This stage highlights the culmination of the team's growth and development, showcasing their ability to work autonomously and productively towards their objectives.

Adjourning

The adjourning stage is the final phase in Tuckman's model of team development. It refers to the emotional and structural aspects of team dissolution. This phase is particularly relevant when the team's work is completed, and members must move on to other tasks or projects. It starts when the primary objective of the team is accomplished, whether it's a project, a report, or any collaborative goal. The team focuses on wrapping up any remaining tasks and ensuring all deliverables are completed to a satisfactory standard.

At this stage, team members are encouraged to reflect on their experiences, discussing what worked well and identifying areas for improvement. This evaluation helps individuals and the team learn from the experience and apply these lessons to future projects. Also, it is common for teams to celebrate their achievements and recognize the contributions of each member. This could take the form of a formal presentation, a celebratory meeting, or informal acknowledgments.

Since the end of a collaborative effort can evoke mixed emotions, at this stage team members might feel a sense of accomplishment and relief but also experience sadness or loss as the team disbands. This emotional aspect is a critical component of the adjourning stage as team members prepare to disband and transition to new roles or teams. This process involves administrative tasks such as finalizing documentation, redistributing resources, and ensuring a smooth handover if necessary. Individuals start planning their next steps, which might involve joining new teams, starting new projects, or returning to their regular duties. This planning ensures continuity and helps team members smoothly transition to their next endeavors.

The adjourning stage is crucial because it provides a structured end to the team's activities, which helps members gain a sense of closure, reducing the potential for lingering feelings of uncertainty or dissatisfaction. Also, reflecting on and documenting the team's experiences ensures valuable insights and knowledge are captured and shared, benefiting future teams and projects. Moreover, acknowledging and celebrating achievements fosters a positive atmosphere and boosts morale, reinforcing a sense of accomplishment and appreciation, while the evaluation and feedback gathered during this stage contribute to the organization's overall learning, helping refine processes and improve future team performance.

In summary, the adjourning stage is a vital part of Tuckman's team development model, addressing both the practical and emotional aspects of team dissolution. By effectively managing this phase, teams and organizations can ensure a positive conclusion to their collaborative efforts and set the stage for future success.

Taking all the above into consideration, it is evident that Tuckman's model provides a comprehensive framework for understanding team development, highlighting both the dynamics and challenges of each stage. This understanding is crucial for educators looking to implement effective teamwork strategies in educational settings. By recognizing the stages of team development and the factors influencing them, educators can better facilitate teamwork and enhance learning outcomes.

Experiential Learning and Roles

The roles individuals take within a team can change according to the task at hand; unlike personality types, roles are not fixed (Lumsden and Lumsden, 2000). Thus, an analysis of teamwork may result in identifying different role types, according to different theories that best describe the assumed stance one has during the various stages of team development.

I suggest that role development can be effectively explained using Kolb's experiential learning cycle (Kolb 2015, 31–63). Kolb offers a model that describes the process through which individuals learn from their experiences, a cyclical pattern of learning consisting of four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation. The cycle can be entered at any point, but all stages must be followed sequentially for effective learning.

Concrete Experience

The "concrete experience" stage involves having a direct, tangible experience. It is the actual event or activity where learning begins. For example, participating in a project, conducting an experiment, or engaging in a hands-on task. Associating this with the "forming" stage observed above, the leadership role, one may assume is that of "encourager," as described by Lumsden and Lumsden. Such an approach is fostering a supportive team environment, crucial for a successful start of a team project. This may also apply to the "adjourning" stage (Belbin 2010, 141).

Reflective Observation

After each experience, learners step back and reflect on what has happened. They observe and reflect on each task from different perspectives. This stage involves thinking about what was

done, how it was done, and what outcomes were achieved. In a teamwork activity, this comes after completing the task. One would reflect on the group dynamics, the strategies used for implementation, the challenges faced by the team, and the overall effectiveness of the task undertaken.

As the teamwork progresses, one's role may shift from that of "encourager" to that of "monitor evaluator" (cf. Belbin 2010, 21–22). This role involves critically evaluating ideas, weighing options, and proposing changes when necessary. It involves exhibiting a more critical attitude by considering various implications of proposals and a thorough judgment of relevant factors. Different perspectives may be advanced at this stage and explanations are given to support new viewpoints, thus demonstrating the analytical nature of the "monitor evaluator" role.

Abstract Conceptualization

In this stage, learners make sense of the reflections by developing theories, concepts, or models. They abstract general principles from the experience and reflections. This involves forming ideas or concepts that explain what happened and why. The team member, therefore, formulates theories about what makes an effective task and what strategies are best for group collaboration and overcoming challenges.

I propose to associate this with the "performing" stage of team development and the role of "assimilator" (Kolb 2015, 108). Assimilators excel at creating logical theoretical models. This stage can result in theoretically sound solutions, but it usually lacks practical applicability. The preference of an assimilator for conceptualization over practical implementation indicates the need for a more grounded approach.

Active Experimentation

This fourth stage involves planning and trying out what has been learned. Learners apply their new concepts and theories to new situations. This is an active process of testing the ideas and concepts developed in the "abstract conceptualization" stage. Team members apply theories to the next project or real-life situation, testing out new strategies for accomplishing a task campaign and improving group collaboration. The roles in this stage may vary according to the nature of the task undertaken.

The Importance of Kolb's Theory

Kolb's model emphasizes a holistic approach to learning that integrates experience, reflection, theory, and application. It recognizes that learning is a continuous process that involves experiencing, thinking, conceptualizing, and experimenting. The benefits of Kolb's model are varied. Firstly, it is highly adaptable, fitting various learning situations and styles. It can be applied in different contexts, such as education, training, personal development, and professional practice. Secondly, by encouraging learners to engage actively with their experiences and reflect on them, Kolb's cycle promotes self-directed learning. Learners take responsibility for their learning process and develop critical thinking and problem-solving skills. Thirdly, the cyclical nature of Kolb's model supports continuous improvement. Learners constantly refine and enhance their understanding and skills through ongoing cycles of experience, reflection, conceptualization, and experimentation.

In summary, Kolb's "experiential learning cycle" is a powerful framework for understanding and enhancing the learning process. It underscores the importance of experience and reflection in learning and provides a structured approach for learners to develop and apply new knowledge and skills.

Conclusions

These role transitions discussed above highlight the dynamic nature of teamwork and the importance of flexibility in assuming different roles based on the team's needs. Kolb's "experiential learning cycle" can explain how roles evolve through the stages of team development, contributing to various aspects of the team's progress. Encouraging initial discussions, critically evaluating ideas, and developing theoretical models are crucial in a team's journey (Rotaru 2021a, 87-92).

One of the most evident uses of such frameworks is in the field of education, in particular, a relational experience is crucial for improving achievement (cf. Măcelaru 2011, 18–21). Understanding these role dynamics can inform best practices for educators and students involved in teamwork. Encouraging a flexible approach to role assignment and fostering an environment where team members can naturally transition between roles as needed can enhance overall team effectiveness. Additionally, recognizing the strengths and limitations of each role can help teams balance theoretical and practical considerations, leading to more successful outcomes. This underscores the complexity and value of teamwork in educational settings. By applying these lessons, educators can better facilitate team development and optimize collaborative learning experiences for their students.

In conclusion, the intersection of Tuckman's "team development model" and Kolb's "experiential learning cycle" can provide a model that enhances team effectiveness and individual learning within educational and organizational contexts. Tuckman's model outlines the stages of team development – forming, storming, norming, performing, and adjourning – each critical for building cohesive and productive teams. Kolb's cycle outlines the learning stages – concrete experience, reflective observation, abstract conceptualization, and active experimentation – that show how individuals learn from their experiences. By integrating these models, this paper demonstrates how teams can navigate developmental stages while fostering growth through experiential learning (Rotaru 2021b, 190-196).

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