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The 6Ds Methodology and Its Application in Corporate Educational Solutions



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ABSTRACT

This study addresses the elaboration of educational solutions by an organization providing services that incorporate education, with a focus on a specific situation of a client. In companies, the use of training programs to meet the needs established by their activities, or even those required by legal requirements is quite common. These programs tend to be numerous, apart from opening a large number of professionals, more than a short duration and a precise effort in the elaboration of educational solutions that bring benefits and are relevant to the results of the organizations. These educational solutions are, generally, performed from the definition of two objectives and two sessions, and can be used other approaches to achieve two expected objectives. This research presents the elaboration of an educational solution with two different approaches. The first is the elaboration of an educational solution using a development approach based on two learning objectives, and the second is the use of an approach based on six disciplines, based on a business need. The objective is to verify the differences between the two programs based on their relevance and ability to generate results for an organization's business. It was found that the educational solution elaborated using the approaches of the six disciplines produces a more consistent training program with the need to obtain business results, in addition to producing metrics capable of assessing the effectiveness of the training program from a business perspective.



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INTRODUCTION

The global context favors the competitiveness of organizations, and the most competitive are those that invest in human capital. Issues such as knowledge, skill, and creativity allow organizations to be innovative and, therefore, aligned with the customer. Investment in human capital also allows organizations to retain talent and knowledge, training new professionals to keep the succession process harmonious and preserve the organizational culture.

The investment needs in human capital permeate the entire organization. The ABNT ISO 9001 standard, which determines requirements for the implementation of a quality management system, establishes the obligation to identify the competence needs of the organization's workers and others involved in quality management, in addition to requiring the determination of programs to comply with these competencies, such as training, among other actions (ABNT, 2015). This demonstrates that investing in human capital is a need for customer service and, therefore, is essential to the business.

The development of this human capital requires training processes for professionals, which usually occurs through the corporate education area of these organizations. These training processes can be carried out in several ways, including the development of training programs based on learning objectives. This is one of the most common approaches.

When talking about designing a training program based on learning objectives, the design of educational content is an essential issue and involves the need to produce resources such as teaching materials, recorded classes, exercises, etc. In this situation, the initial concern is that the process is sufficiently capable of producing relevant, adequate content and that it helps the student to walk the learning path, favoring the fulfillment of the established learning objectives, which generated the need to carry out the training program (FILATRO; CAIRO, 2015).

In this work, the proposal is to present a different form of approach, in which we would not specifically focus on learning objectives and the production of educational content, but on the elaboration of a corporate educational solution, aligned with the needs of the business and capable of to consider the entire journey of the professional who will participate in the training process. While educational content is part of the educational solution, it is no longer the whole, but a part of a larger set of educational actions.

This approach was established by Wick and his collaborators (2011), who proposed a model with organizing principles in six points, called “six disciplines”. The approach of the six disciplines is specific to the construction of educational solutions and aims to maximize learning performance, bringing results to the organization's business. For this reason, this work has the general objective to verify the differences between a training program elaborated on learning objectives and an educational solution elaborated through the six disciplines; in this way, it will be possible to discuss its relevance and ability to generate results for an organization's business.

Theoretical reference

The six disciplines proposed as guiding principles for the construction of educational solutions represent a process, but each one of them can be used individually to improve the results in the construction of educational content. Each of them also has an intrinsic objective and expectation of performance improvement.

Figure 1 presents an overview of the six disciplines that will be addressed in this work:

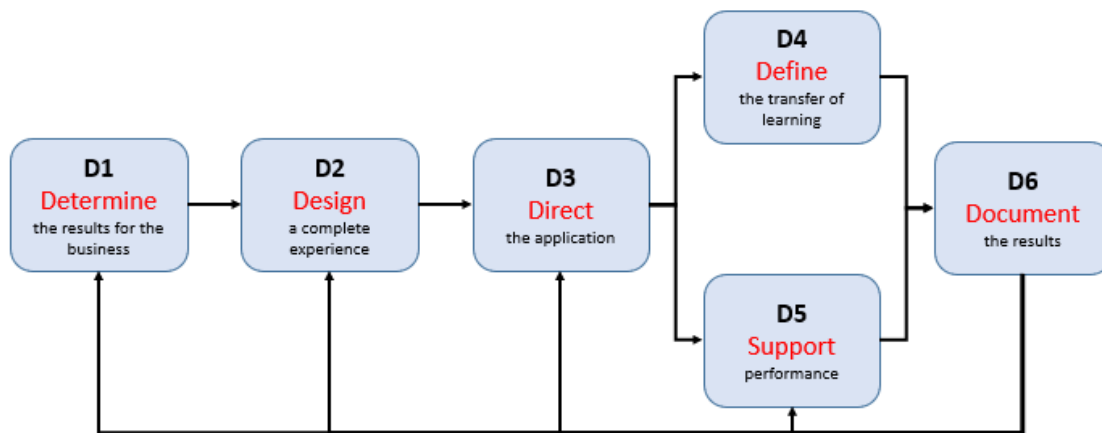


Figure 1: The 6 Ds.

Source: adapted from (WICK; POLLOCK; JEFFERSON, 2011).

Discipline 1 – Determine the results for the business

Human capital, understood as the source of competitive advantage in today's economy, is based on the constant growth of knowledge, leading to continuous investment in employee

development. This continuum is essential for employees to stay in the company and keep up to date with the constant changes in contemporary society. With investments in employee development, there is an expectation of certain results in the company's business, such as greater customer satisfaction, higher talent retention, and improved efficiency and productivity (WICK; POLLOCK; JEFFERSON, 2011).

From this perspective, the beginning of the project relates precisely to the last level of James and Wendy Kirkpatrick's evaluation model. Such a model has four levels of assessment. The first level aims to measure student satisfaction. This satisfaction is the quality perceived by the student in the training and involves some issues, such as didactics, room conditions, and materials available, among others. The next level involves learning issues such as the skills and knowledge acquired by the student. The third level covers the worker's behavioral changes to the activities he performs. Finally, the fourth level involves precisely the issues of return to the company, in which the final results of the training are evaluated to the investment made, that is, those that bring benefits to the business (KIRKPATRICK; KIRKPATRICK, 2016).

The beginning of the development of an educational solution, starting with the business benefits, instead of the learning objectives, presents some advantages in the view of Wick and his collaborators (2011), such as making learning something more strategic, in addition to increasing adults' motivation to learn. Two other advantages are the increase in the probability of investments, since the expected return for the business is better indicated, and the awakening of greater attention to responsibility between managers from different areas of the organization and training managers.

Discipline 2 – Design a complete experience

Offering a complete process of the educational solution is the object of Discipline 2 since several factors affect the results of the training actions. The idea of a complete process includes considering in the planning of the educational solution the situations that precede the training, as well as those that follow it. Designing a solution that considers the before and after of the training actions themselves means assuming that the student's experience is not restricted only between the beginning and end of a course, on the contrary: it is a larger process, through which it achieves the improvement of its performance and the generation of the expected results (WICK; POLLOCK; JEFFERSON, 2011).

Subject 2 is presented with four learning phases, with phase 1 being marked by preparation activities, such as reading materials or carrying out preliminary activities. In terms of developing the educational solution, phase 1 encompasses the analysis of training needs, the selection of students who participate in the learning process, the realization of the course design, the issuance of invitations to participate or call, or even of marketing and communication actions, as well as carrying out preliminary assessments. Phase 2 refers to learning itself, in which the instructional activity of the course will be carried out. Developmental activities in this phase include carrying out classroom instructions and performing simulations, exercises, and other techniques. Phase 3, on the other hand, involves the transfer of learning to the work carried out by the student and has as development activities the establishment of goals, the planning of actions for application at work, the monitoring of the student, the elaboration of progress reports, among other activities. Finally, phase 4 comprises carrying out self-assessments (or 360° assessments) and celebrating achievements (WICK; POLLOCK; JEFFERSON, 2011).

Discipline 3 - Direct the application

The use of instructional methods that provide a bridge between learning and the performance of actions is the object of Discipline 3. Learning methods must use andragogical concepts, which are relevant and useful, as they provide adequate instructions and time for the determination of goals and application planning. Regardless of the methodology used to promote adult learning, it is important that it is directed towards solving something practical, in addition to considering its accumulated experience as resources to be explored and used (WICK; POLLOCK; JEFFERSON, 2011; KNOWLES, 2020).

The assumption in this discipline is that instructional methods must be able to deliver training more efficiently, considering the desired business results and behaviors so that they can be achieved (WICK; POLLOCK; JEFFERSON, 2011).

Discipline 4 – Define the transfer of learning

The transfer of learning established in Discipline 4 is related to the practical application of the acquired knowledge and the skills or attitudes developed from the contents of the educational solution in the worker's work activities. Therefore, its objective is to avoid waste due to the absence of practical application from training programs. If the way of working is not improved in some way, the training program has not generated any value, since these programs create value

only when the new knowledge and skills, transmitted by them, are transferred to the individual's work practice and from the company. As can be seen, Discipline 4 represents a paradigm shift, since most professionals who work in training and development understand that practical application at work is something that does not permeate their list of responsibilities (WICK; POLLOCK; JEFFERSON, 2011).

Discipline 5 – Support performance

Assuming that the training process is not finished until the new knowledge and skills are successfully applied, in a way that improves performance, it is understood that students need support for the application of what was offered in the educational solution. In this way, Discipline 5 addresses the support that must be given by top leadership to develop a culture in which managers are aware of their responsibility to support learning.

The application of learning involves continuous support from the leadership to increase the possibility of student success, as well as the appropriate application of knowledge at work (WICK; POLLOCK; JEFFERSON, 2011).

Discipline 6 - Document the results

In the organizational learning process, knowledge retention is essential. This retention can be understood as the construction of organizational memory and has as its object the storage of information based on organizational history; with this, such information can be retrieved, which helps in decision making (FLEURY; OLIVEIRA, 2002).

With this concept, Discipline 6 establishes the need to document the results in a way that is relevant and convincing, capable of giving credibility to justify further investments and a continuous improvement in the results. Having access to the project history is essential not only to correct the course but also to ensure that the results of the application of the educational solution add value to the organization (WICK; POLLOCK; JEFFERSON, 2011).

METHOD

Since this article aims to present the 6Ds in the elaboration of corporate educational solutions and to highlight their differences from the traditional method, we opted for the narrative study of

topics with a qualitative approach, obtained from interviews, documents, and personal materials (SAMPIERI; COLLADO; LUCIO, 2013).

The problem-solution structure of this study was as follows: **context** (customer demand for a corporate educational solution); **characterizations** (the author of this article is the one who makes the report); actions (step by step for the elaboration of the corporate educational solution); **problem** (what are the differentials of the 6Ds methodology in the elaboration of corporate educational solutions); and **resolution** (the differentials of the use of 6Ds in the elaboration of corporative educational solutions) (SAMPIERI; COLLADO; LUCIO, 2013).

RESULTS AND DISCUSSION

To illustrate the differentials of the 6Ds methodology, two educational solutions were created based on real demand from a company. In the first example, a traditional process was adopted for project management, and in the second, an approach based on the six disciplines was used.

The person who carries out the report, presenting the step by step, is one of the authors of this article, who has been working for thirteen years with educational solution design, being certified by “The 6Ds Company” and “AfferoLab”¹ to design complete learning and development experiences with measurable results and focus on business strategy.

Situation 1: development of an educational solution using project management

The name given to the course was **Process Management**, which aimed to meet a specific demand from the appliance industry. This industry created an exclusive, accredited technical assistance network and hoped that the network units would have autonomy with their processes and know-how to manage the business and people while prioritizing and promoting a positive experience for their customers.

Based on this assumption, the course was designed with a focus on the public of entrepreneurs who were the owners of technical assistance units for home appliances. Considering these data collected with the client of the educational solution, a course plan was proposed according to Table 1:

Table 1: Course plan

Element	Description
Learning objective	Apply process management techniques.
Modality	Distance learning, synchronous classes.
Workload	14 hours.
Program content	<ul style="list-style-type: none"> • Flowchart; • Planning and strategies; • Analysis and implementation of processes; • Cost reduction; • Process control and monitoring; • Monitoring of improvement indicators of the redesigned processes.

Source: the authors.

For this course, the use of dialogued expositions, problematizations, experiences, group dynamics, games, simulations, films, and individual and group exercises were established as teaching and learning strategies.

The course evaluation was a self-assessment by the participant and an assessment by the professor regarding the proposed activities.

In this example, the focus is on the learning objective, that is, on what the participant will know how to do at the end of the course, which can meet a primary need of the client.

Situation 2: elaboration of an educational solution using the approach of the six disciplines

In the second situation, the same customer needs to be declared in situation 1 were used, however, a program was planned with the title: **Innovating in people and process management**.

According to Wick *et al.* (2011), most corporate courses prioritize learning objectives that translate into what participants will be able to accomplish at the end of the course. The approach proposed by the six disciplines proposes that the objectives are business objectives, that is, what

they can accomplish in their work environment, which is directly related to performance and is addressed in **Discipline 1 – determine the results for the business.**

To find out which business objectives need to be met, the Wicks and their collaborators (2011) propose the **Results Planning Round.** In this “round”, four questions are suggested that need to be investigated with the client, whose answers will directly contribute to the definition of the program. The questions and the result of the investigation are described in Table 2:

Table 2: Applied results planning round.

Question	Result
What is the business needs to be met?	The appliance industry created an exclusive technical assistance network. Its objective, in addition to promoting the customer experience, is to have autonomy with its processes and to know how to manage the business and people.
What will participants do differently and better?	Manage people and processes (detailing specified in the business objective).
Who or what can confirm these changes?	Survey with customers of technical assistance, performance evaluation, and 360° assessment.
What are the specific success criteria?	Present, within six months, positive percentages of customer satisfaction, and positive feedback from the team regarding the objectivity of processes and management.

Source: the authors, from WICK, POLLOCK, and JEFFERSON (2011).

Based on these responses, the following **business objectives** were developed, which will be prioritized in this program: **defining** the technical assistance strategy in the short, medium, and long term; mapping all technical assistance processes; **identifying** critical technical assistance knowledge; **creating** an action plan to improve current technical assistance processes; **giving** feedback assertively, contributing to the development of the team.

The objectives are documented and sent to the customer for validation and then the educational solution begins to be developed.

The next step in the six-discipline approach is the application of **Discipline 2 – Design a complete experience**.

Wick *et al* (2011) clarify that the scope of responsibility of the training and development area needs to go beyond the delivery of programs, as it is necessary to deliver results by replacing instructional designs with experience designs, recommending a process with four phases of apprenticeship. With this guidance, the four phases of the proposed educational solution are described in Table 3:

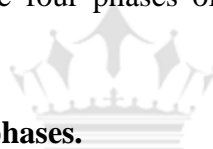


Table 3: Application of the learning phases.

Phase I - preparation	Phase II - learning	Phase III - transfer	Phase IV - realization
<ul style="list-style-type: none"> • Meeting with managers; • Analysis of needs; • Selection; • Assessment plan; • Course design (with inverted classroom); • Invitation card. 	<ul style="list-style-type: none"> • Online classroom instructions; • Discussions; • Simulations; • Exercises. 	<ul style="list-style-type: none"> • Set goals; • Action planning; • Follow-up; • Discussion with the manager; • Collaboration. 	<ul style="list-style-type: none"> • Self-evaluation; • 360° evaluation; • Performance evaluation; • Recognition/reward.

Source: the authors, from WICK, POLLOCK, and JEFFERSON (2011).

Moving on to Discipline 3 – **Direct the application**, Wick *et al* (2011) reinforce the importance of the program by helping participants to know **how** and **when** to use what they have learned. This discipline proposes to reduce the distance between learning and application at work, establishing bridges for participants to apply what they have learned, improve their performance and obtain results. From the Planning Wheel, the applications were established, as shown in Table 4:

Table 4: Applications from the planning round.

What is the business needs to be met?	The appliance industry created an exclusive technical assistance network. Its objective, in addition to promoting the customer experience, is for it to have autonomy with its processes and to know how to manage the business and people.
What will participants do differently and better?	Manage people and processes.

Source: the authors, from WICK, POLLOCK, and JEFFERSON (2011).

From the application, the value chain with its three main links is established. Table 5 presents this chain for the case under study:

Table 5: Value chain.

Expected results	Necessary skills and behaviors	Modalidades de treinamento
Manage people and processes	Define the technical assistance strategy in the short, medium, and long term.	<ul style="list-style-type: none"> • Flipped classroom; • Online classroom instructions; • Discussions; • Simulations.
	Map all technical assistance processes.	<ul style="list-style-type: none"> • Online classroom instructions; • Discussions; • Exercises.
	Identify critical technical assistance knowledge.	<ul style="list-style-type: none"> • Flipped classroom • Online classroom instructions; • Discussions; • Exercises.
	Create an action plan to improve current technical assistance processes.	<ul style="list-style-type: none"> • Online classroom instructions; • Discussions; • Simulations.
	Give feedback assertively, contributing to the development of the team.	<ul style="list-style-type: none"> • Online classroom instructions; • Discussions; • Simulations.

Source: the authors, from WICK, POLLOCK, and JEFFERSON (2011).

Wick and his collaborators (2011) are emphatic in stating that learning and development programs create value when new knowledge and skills are transferred outside the learning environment, being put into practice in the work of the individual and the company. This concept is addressed by **Discipline 4 – Define the transfer of learning**. According to these authors, three factors contribute to the transfer of learning: **application capacity** (current and valid content; practical and applicable approach; work situations that present opportunities for application); **motivation to use** (predisposition to learn and change; belief that use improves performance; belief that high performance will be recognized/rewarded; the value of recognition/reward); and **work environment** (manager encourages use, gives feedback and

coaches; colleagues open to change; the existence of recognition/reward for actions that favor change).

For this corporate educational solution, two initiatives were established to support the transfer of learning, the first being **collaborative learning**, in which program participants will be invited to be part of a learning community, whose objective is to allow reflections and situations of each technical assistance are shared and applied daily, and the second initiative, the **coaching cycle**, in which participants will be able to choose one of the instructors of the program or one of the entrepreneurs (owners of the technical assistance units) to request feedback, which will be carried out through a computerized system with possible scheduling for an online session if they wish.

The first initiative has no deadline, as it is expected to be an action that encourages the involvement of technical assistance employees. The second initiative will involve the program's instructors only in the first six months, as the idea is for the team to be autonomous in this process and create a relationship network with all technical assistance owners.

With this approach, we seek to design learning and development programs that have an approach that involves systems, people, and processes to create an environment conducive to transfer, in addition to overcoming inertia and improving performance.

After the implementation of Discipline 4, it is necessary to apply **Discipline 5 – support performance**, which essentially implies extending the learning period, accelerating the transfer to achieve improved performance (WICK; POLLOCK; JEFFERSON, 2011). In general, highly effective programs offer many resources, which leads us to establish points for the case studied.

For this corporate educational solution, the use of social networks was proposed to facilitate collaborative learning and to involve managers and instructors throughout the process through coaching, feedback, recognition, and reward for innovative initiatives that arise from new and shared practices.

Finalizing the approach, the **results must be documented**, as established in Discipline 6, in which Wick and his collaborators (2011) guide on the need and importance of documenting the results convincingly, justifying the continuous investment and supporting the permanent

improvement. In this way, actions can be categorized as: **relevant** (against the course goals/desired results for the client); **credible** (intelligible, sensible, fair, rigorous, and credible); convincing (memorable, impactful, and concise); **efficient** (fulfills the first three criteria, makes good use of time and resources).

Wick *et al* (2011) also reinforce that, in this discipline, it is important to review the Planning Round and, if necessary, adjust it.

Among the possible metrics to be used, the best ones are those that the client considers relevant and reliable. The following are the ones chosen for our educational solution: **opinions**: customer satisfaction from the authorized network and **observations**: self-assessment, 360° assessment, and performance evaluation.

An important point in the implementation of Discipline 6 is to establish results that matter to the business, not confusing this with learning management metrics (WICK; POLLOCK; JEFFERSON, 2011).

Final considerations

Customers of organizations that work in corporate education have demands that can be very different. Some of these clients want to solve an organizational problem and, for that, programs with business objectives have a greater potential to be a more assertive solution.

Although there seems to be no single correct way to approach corporate education, this study demonstrates that when we delve more deeply into an organization's business needs, it is possible to produce a training program that is more oriented towards achieving concrete results. This means that training is no longer seen only as an activity that generates cost and becomes something that can effectively improve organizations' customer satisfaction and their financial results.

These business-oriented results can be obtained to a greater or lesser extent using the full or partial approach of the six disciplines. It is possible to note, for example, that the use of Discipline 1 would already create a need to look at the results of the client's business, having the potential to generate a better training program. The possibility of partial use of this discipline

also allows organizations to become familiar with the methodology, being able to implement each discipline at a time, as their maturity in the development of educational solutions increases.

On the other hand, another issue to be considered in the use of the six disciplines is their limited application in courses offered in an open format, that is, those published to the public and whose class is heterogeneous. In this situation, the businesses of the students' companies can be completely different, making it impossible to use the six-discipline approach and making the learning objective approach the most appropriate.

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